AND A MANUFACTURING AND TEXTILE PAPER, DEVOTED TO THE UPBUILDING OF SOUTHERN MANUFACTURES AND THE DEVELOPMENT OF THE MATERIAL RESOURCES OF THE SOUTH.

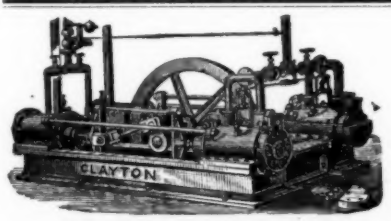
VOL. 7. No. 4. WEEKLY. | BALTIMORE, MARCH 7, 1885 | $3.00 PER ANNUM. SINGLE COPIES, 10 CENTS.

—MANUFACTURERS OF—
CARD CLOTHING
Of Every Description.
COTTON and WOOLEN MACHINERY.

JAS. SMITH & CO.
Works, 413 to 421 Race St., Cor. of Crown.
Office & Store, 137 Market St., Philadelphia.

—DEALERS IN—
Manufacturers' & Mill Supplies
Of Every Description.

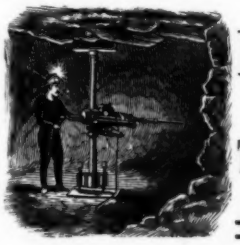
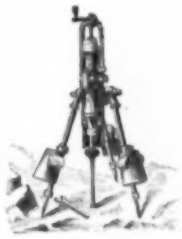
OFFICE, Fletcher & Sharpe's Block, INDIANAPOLIS.
INDIANAPOLIS TERRA COTTA CO., Indianapolis, Ind.
WORKS, BRIGHTWOOD, INDIANA.
Manufacturers of All Kinds of TERRA COTTA.
Send for Estimates, Catalogues and Samples.
WILLIAM F. STILZ, President. G. L. DICKENSON, Secretary and Treasurer. JOS. JOINER, Superintendent.



Improved Duplex Air Compressor.

CLAYTON AIR COMPRESSORS
Rock Drills, Mining Pumps and General Mining Machinery,
For Catalogues, Estimates and Information, Address
CLAYTON STEAM PUMP WORKS, 45 & 47 York St., BROOKLYN, N. Y.

ELEVATORS
Send for Illustrated Circulars.
MORSE ELEVATOR WORKS.
MORSE, WILLIAMS & CO. Successors to CLEM & MORSE
Manufacturers and Builders of HYDRAULIC STEAM, BELT and Hand-Power, PASSENGER and FREIGHT ELEVATORS
With most approved Safety Devices. Dumb-Waiters, Automatic Hatch-Doors, &c.
Office: 411 CHERRY STREET,
Works: FRANKFORD AVE., WILDEY & SHACKANAXON STS.
PHILADELPHIA, PA.
—Branch Office, 108 Liberty Street, NEW YORK.—


"ECLIPSE" "STRAIGHT LINE"
ROCK DRILLS, AIR COMPRESSORS,
Machinery for Tunneling, Grading, Mining, Quarrying, etc.
TEN COMPLETE TUNNELING PLANTS FURNISHED FOR SOUTH PENNA. RAILROAD, PA.
FOR CATALOGUES, ESTIMATES, &c., ADDRESS,
INGERSOLL ROCK DRILL CO., 10 Park Place, N. Y.
MORTON, REED & CO., Agents, Baltimore.


LOWELL CARD CO.
—MANUFACTURERS OF—
CARD CLOTHING
I. CLARK, President. S. S. GOULD Treasurer.
Of Every Description, LOWELL, MASS.

SHULTZ BELTING COMPANY, ST. LOUIS, MO.
OUR BELTING is made of Leather, tanned on the surfaces only; the interior (which is the fibre and strength of the hide) is not tanned, but Rawhide fulled and softened by our patent process. Our belting is more pliable, and hugs the pulley better and transmits more power than any other Belt. It does not pull out at the laceholes or rivets. It stretches less than any other Belt. It works equally well for the largest Driving Belts or for the fastest running machinery and smallest pulleys. OUR LACE LEATHER is made of Rawhide, by our patent process, without any tanning and is stronger and will wear better than any other. WE ALSO MAKE THE BEST PICKER LEATHER AND BELT GREESE IN THE COUNTRY.
Southern Agents—FRED. N. OGDEN, New Orleans, La. J. H. COFFIN & CO., Memphis, Tenn. J. L. LINDSAY, Richmond, Va.

ESTABLISHED **POOLE & HUNT,** —1851—

Founders and Machinists.

POOLE & HUNT'S

LEFFEL TURBINE WATER WHEEL,

Prices as Low as any other First-Class Wheel.

Machine Moulded

MILL GEARING.

Our plant for the production of MACHINE-MOULDED MILL GEARING is unequaled in the country, and we are prepared to fill orders with dispatch and at GREAT SAVING IN COST OF PATTERNS.

Shafting, Pulleys,

HANGERS, PEDESTALS.

SHAFTING, PULLEYS, HANGERS and COUPLINGS, of latest and most approved designs.

N. B.—Shipping facilities the best in all directions.

Send for Pamphlet. Send for Price-List.

List of our Gearing Mailed on Application

POOLE & HUNT, BALTIMORE, MD.

STANDARD COAL CO.

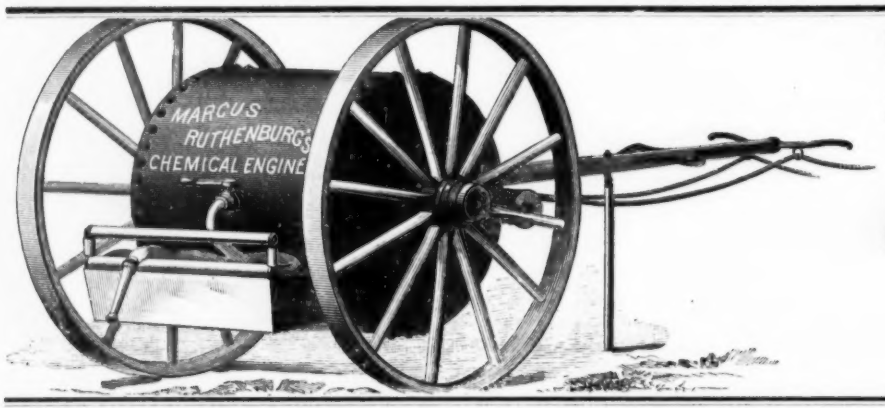
MINERS AND SHIPPERS OF

JELLICO MOUNTAIN COAL

SCREENED LUMP COAL for steam and machinery purposes a specialty. For prices and freights, address

E. E. McCROSKEY, Prest.

56 Clinch Street, - - - Knoxville, Tenn.



THERE IS NOT a town, village or large mill in the land that can afford to be without the protection from fire afforded by this Chemical Engine. Always ready for instant use. Simple, substantial and efficacious. Write for circulars to

THE RUTHENBURG

Automatic Fire Extinguishing & Engineering Co.

64 West Third Street, Cincinnati, O.

MARCUS RUTHENBURG, Manager.

PARKER Shot Gun

Report of the International Gun Trial, held at Bergen Point, N. J., April 3, 1884. Extract from *Turf, Field and Farm* reporting the same: "The Parker Gun, our prominent home manufacture, won the admiration of all by its fine shooting qualities. It registered in both the 10 and 12-bore classes; the greatest number of pellets in the 30-inch circle, and therefore must be awarded the palm for pattern."

PARKER BROTHERS, Makers,

MERIDEN, CONN. **New York Salesroom, 97 Chambers Street.**

AMERICAN SUPPLY COMPANY,

Formerly Myron Fish & Co., of Valley Falls, R. I., and Kendrick Loom Harness Co., of Providence, R. I.

—MANUFACTURERS OF—

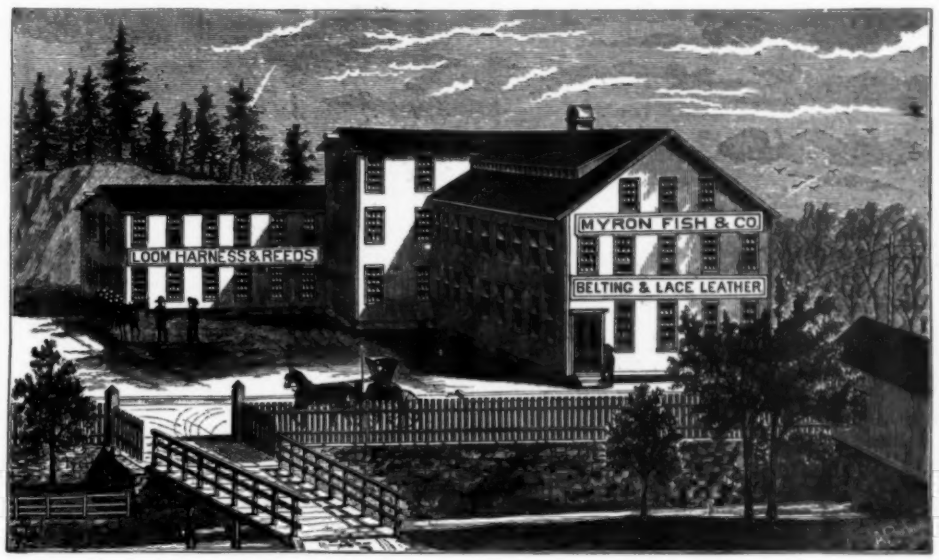
LOOM HARNESS AND REEDS,

Oak Belting, Lace and Picker Leather, and Dealers in Supplies for Cotton, Woolen and Silk Mills.

Agents for Joseph Noone's Sons'
Roller, Slasher and Clearing Cloths.

—Agents for—
RODDICK'S PATENT IMPROVED OIL CANS.

Calf, Sheep and Lamb Roller Skins, and Roll Coverers' Tools.



WE HAVE
Unequalled Facilities for Furnishing
Shuttles and Heddle Frames,
WIRE HEDDLES and WIRE GOODS
Of all Descriptions.

Special Notice to Worsted and Silk Mills.

We Manufacture both Worsted and Cotton Machine-Knit Mail Harness for Weaving Fine Worsted and Silk Goods. Also a Full Line of Supplies for Jacquard Looms.

Office and Salesrooms, 10 Exchange Place, Providence, R. I. —FACTORIES:— PROVIDENCE and VALLEY FALLS, R. I.

A. D. LOCKWOOD, Pres. JOHN KENDRICK, Vice-Pres. MYRON FISH, Treas. JOHN A. CARTER, Sec. JOSEPH H. KENDRICK, Gen'l Agent.

THE WHITIN MACHINE WORKS,

J. LASSELL, President and Treasurer. G. E. TAFT, Agent. H. ELLIS, Superintendent.

MANUFACTURERS OF

COTTON MACHINERY

Openers, Lappers, Cards,

Railway Heads, Drawing,

RING SPINNING, SPOOLERS, WET and DRY TWISTERS,

REELS,

WARPERS, DRESSERS, LOOMS, &C.

Whitinsville, Worcester County, Mass.

TIRRILL'S EQUALIZING GAS MACHINE!

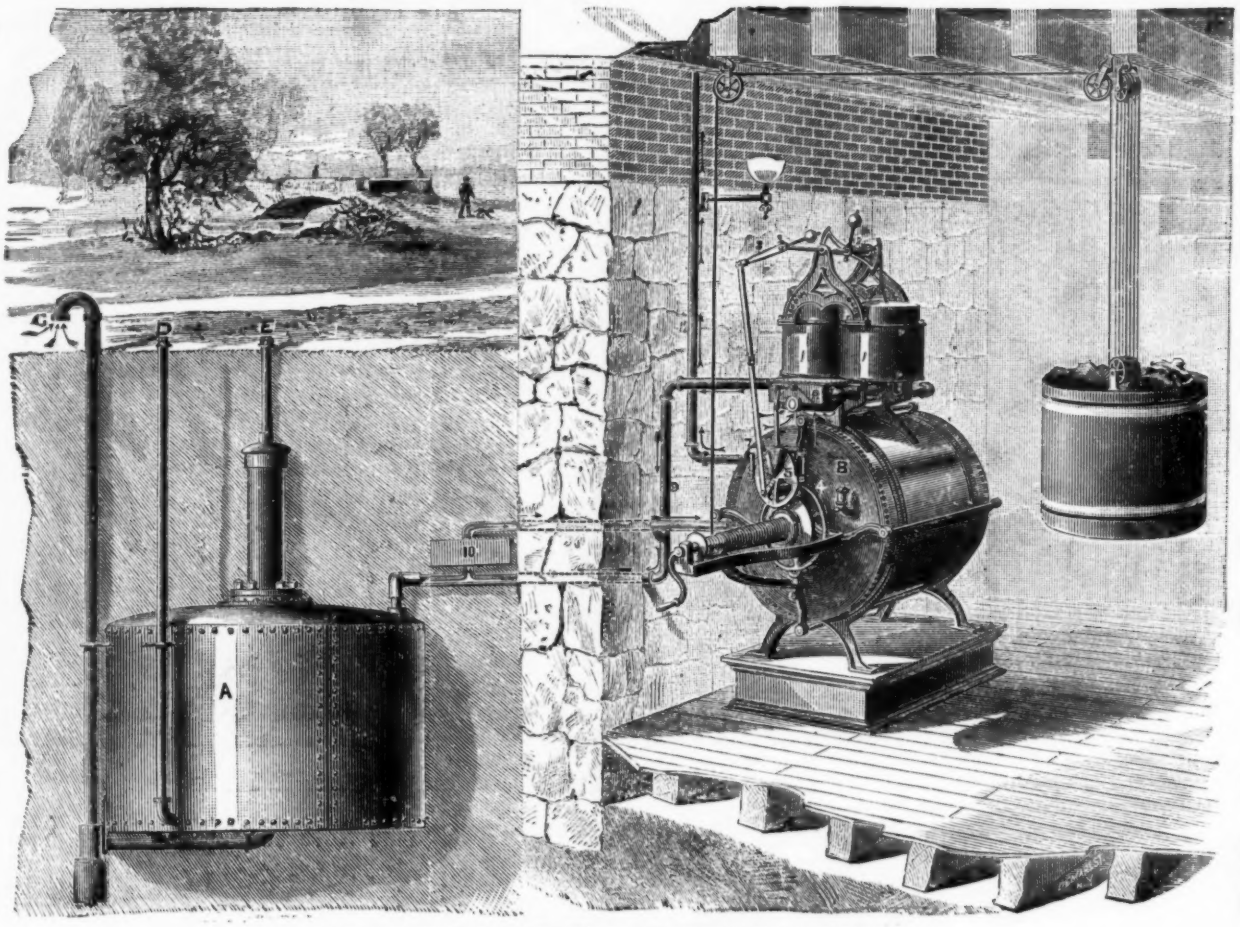
Only Gas Machine that makes

UNIFORM GAS.

No Fire, No Smoke, No Smell.

Plain Bat Wing Burners only Required.

GAS ALWAYS Perfect.



Less than $1. Per Thousand Feet.

Machines of any CAPACITY.

Read Circulars Before Buying.

Simple, Perfect, and Reliable.

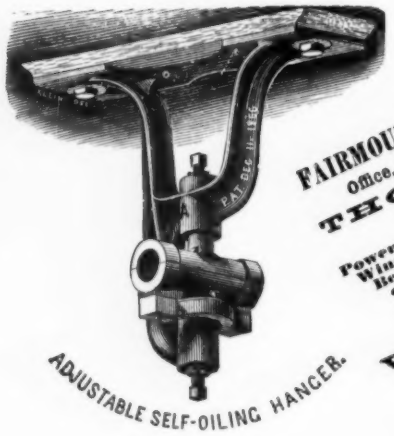
Absolutely Safe.

Approved by Underwriters.

Read who endorses Them.

FOR CIRCULAR AND FULL INFORMATION, ADDRESS:

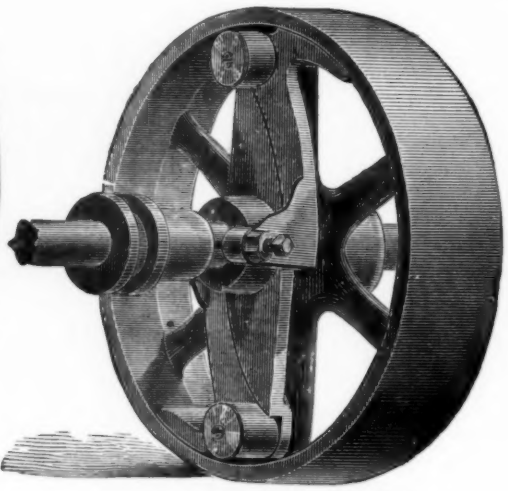
TIRRILL'S GAS MACHINE CO., 39 Dey St., New York, N. Y.



ADJUSTABLE SELF-OILING HANGER.

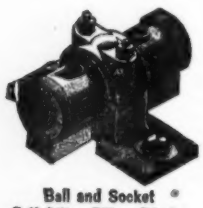
FAIRMOUNT MACHINE WORKS.
Office, 2106 Wood St., Philadelphia.
THOMAS WOOD,
Manufacture as Specialties
Power Looms, Patent Bobbin or Quill Winding Machines, Plain and Presser Beaming Machines, Plain and Presser or Spooling Machines, Reeling, Warp splitting, Dyeing, Sizing, Scouring, Fulling and Calendering Machines,
WARPING MILLS,
16, 18 and 20 yards Circumference,
WITH IMPROVED HECKS.
SHAFTING,
With Patent
ADJUSTABLE SELF-OILING HANGERS,
8, 10, 12, 15, 18, 20, 24 and 30 in. drop.
Also WALL, POST AND GIRDER HANGERS.
Pulleys, from 4 inches to 10 feet in diameter.
PATENT FRICTION PULLEY.
Pulleys in two parts, any size required.
PATENT HOISTING MACHINES.
Oil Presses for Lard, Fish and Paraffine.

PULLEY IN TWO PARTS



PATENT FRICTION PULLEY.

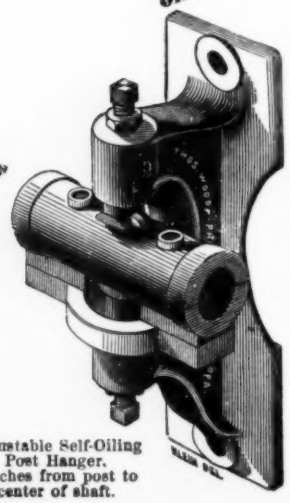
Simple, reliable and very durable. Suitable for any kind of driving, they serve equally well as driver or driven.



Ball and Socket Self-Oiling Pillow Block.

Special Driving,
such as Angular, Muley, and Gallows Driving, furnished for any position where possible to transmit power by belts.
PULLEYS from 4 inches to 10 feet in diameter.

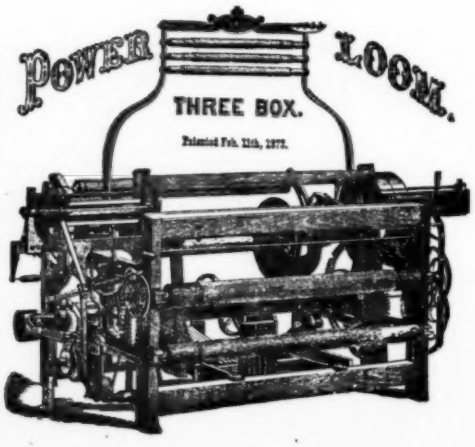
DOUBLE-BRACED ADJUSTABLE SELF OILING HANGER.



Adjustable Self-Oiling Post Hanger. 6 inches from post to center of shaft.

Why use old style Bearings, that require oiling every day, when you can get Bearings at less cost that only require oiling once in Six Months, and thus save oil and labor enough to pay for the bearings in use. Test the matter for yourselves; a trial always secures the trade.

ADDRESS,
THOS. WOOD,
Office, 2106 Wood St.
PHILADELPHIA, PENNA., U. S. A.



HOWARD & BULLOUGH, & RILEY,

BUILDERS AND IMPORTERS OF

COTTON MACHINERY.

ALSO, IMPORTERS OF

Wool, Worsted and Flax Machinery and English Card Clothing. Hardened and Tempered Steel Wire a Specialty.

MILL ENGINEERS. No. 19 PEARL STREET, BOSTON, MASS.

GREAT SUCCESS OF OUR

PATENT ELECTRIC STOP-MOTION,

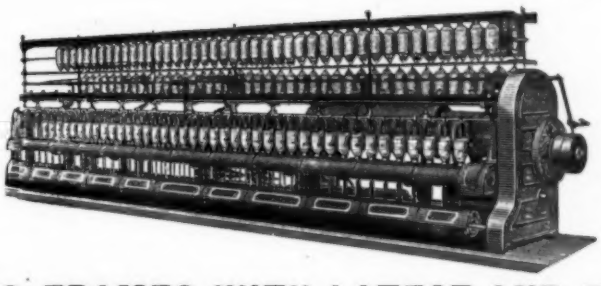
ALREADY APPLIED TO OVER

9,000 DELIVERY HEADS OF DRAWING, AND

62,000 INTERMEDIATE ROVING SPINDLES.

The quality of Sliver produced by our Frames surpasses all others, and Waste, Single and Roller Laps are prevented, and production increased.

Correspondence Solicited. Send for Circulars.



SPECIALTIES:

EXHAUST OPENERS, LAPPERS, (LORD'S EVENERS,) IMPROVED ROLLER CARDS, PRODUCE MORE AND MAKE LESS WASTE THAN ANY OTHER.

7,000 SELF-STOPPING WARPERS, Already working with latest improvements.

800 CYLINDER SLASHERS Now at work in America alone

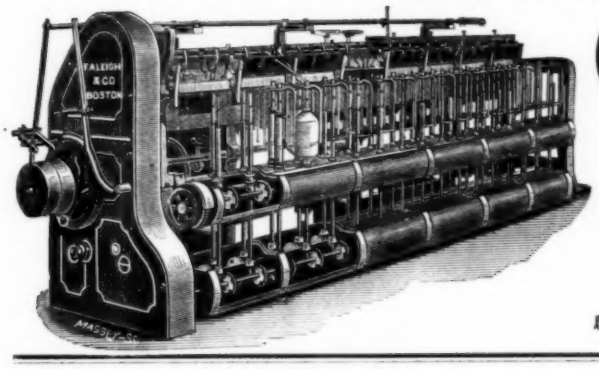
Patent and plain Spindle, Spinning and Twisting Frames, Spoolers, Reels and Circular Warpers, Cloth Folders, Size Kettles plain and Fancy Looms, Spindles, Flyers and Fluted Rolls.

SLUBBING AND ROVING FRAMES WITH LATEST AND BEST IMPROVEMENTS.

F. A. LEIGH & CO.

Importers of Mill Machinery,

—No. 40 WATER STREET, BOSTON, MASS.—



Openers, ❋ Lappers, ❋ Cards, ❋ Drawing,

Slubbing and Roving Frames,

CARD CLOTHING, ETC.

Correspondence Solicited. Send for Circulars.

WHITINSVILLE SPINNING RING CO.

The Simplest and Best Method of Adjusting Rings.

WHITINSVILLE, MASS., U. S. A.

SUPERIOR WORKMANSHIP.

NOT EXCELLED IN DURABILITY.

EVERY RING WARRANTED.

SEND FOR SAMPLE AND PRICE-LIST.

MOSHELEY'S CELEBRATED MOLLIS OIL.

It is a splendid lubricator for Stationary Engines, Printing Presses, Paper Mills, Saw Mills, Cotton and Woolen Mills, Spindles, &c. It is the *cheapest* and *best* Oil for Machinery, Harness, Belts, Boots and Leather generally. Warranted a Water-Proof Leather Preservative. It is penetrating, and renders soft and pliable the hardest leather.

Fire-Proof, Barn, Fence, Bridge and Roof Paint

MIXED READY FOR USE.

Our Fire-Proof Barn, Fence, Roof and Bridge **PAINT** is unsurpassed for painting exposed surfaces, such as Tin, Iron or Wood Roofs, Wagons, Farm Implements, Fences, Barns, Cars, &c., &c. mixed ready for use, will not settle, will be found convenient, saving labor and time, and at the same time is handsome and durable. SOLD IN ALL-SIZED PACKAGES FROM 1 to 50 GALLONS.

Prices Mailed on Application. **HIRSHBERG, HOLLANDER & CO., 195, 197, 217 and 240 W. Pratt St., Baltimore.**

BILLINGS' PATENT BREECH-LOADING SINGLE BARREL SHOT GUN.

Provided with Close Shooting Detachable Muzzle for contracting the shot.

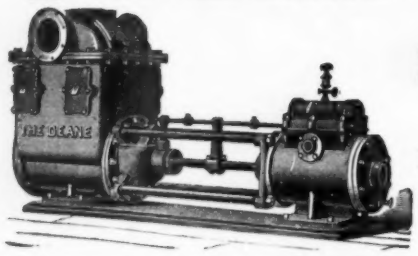
Uses the "A" Brass or Paper Shells.

MANUFACTURED AND FOR SALE BY

THE BILLINGS & SPENCER CO.,

HARTFORD, CONN.

THE DEANE STEAM PUMP CO., HOLYOKE, MASS.



MANUFACTURE

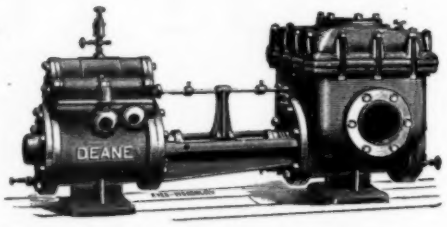
Every variety of Pumping Machinery

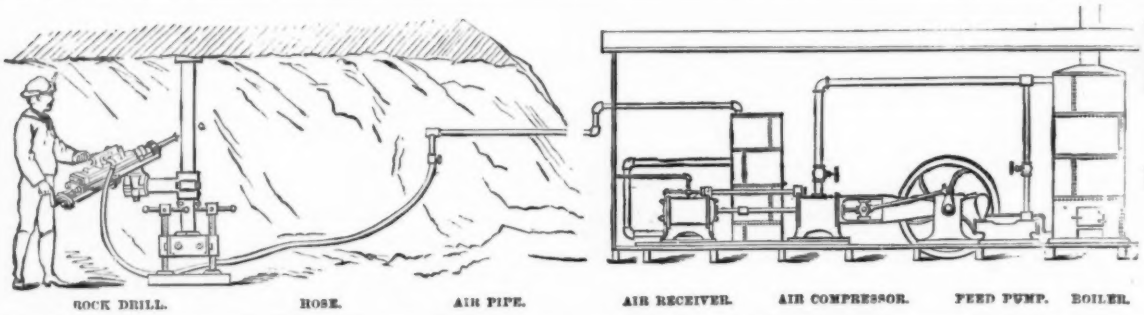
VACUUM PUMPS FOR SUGAR WORK, ETC.

IRRIGATION PUMPS ARE SPECIALTIES.

Water Works Pumping Engines for Cities and Towns.

SEND FOR NEW ILLUSTRATED CATALOGUE.

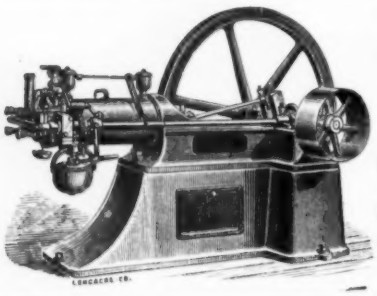




RAND DRILL CO.

23 Park Place, NEW YORK.

Rock Drills,
Air Compressors, and
General Mining Machinery,
Rackarock Blasting Powder,
Blasting Batteries and Fuse.



Over 14,000 in Use. # Otto Gas Engine **20 to 70 per ct. less Gas consumption than ANY other ENGINE.**

Working Without Boiler, Steam, Coal, Ashes or Attendance.

Started instantly by a Match, it gives full power immediately. When stopped, all expense ceases.

No explosions, no fires nor cinders, no gauges, no pumps, no engineer or other attendant while running. Recommended by insurance companies. UNSURPASSED IN EVERY RESPECT for hoisting in warehouses, printing, ventilating, running small shops, &c. **Sizes: 1 to 25-horse power.**

Branch Office, 214 Randolph St., Chicago. SCHLEICHER, SCHUMM & CO., N. E. cor. 33d and Walnut Sts., Philadelphia.

GEORGE DRAPER & SONS, Manufacturers —of—

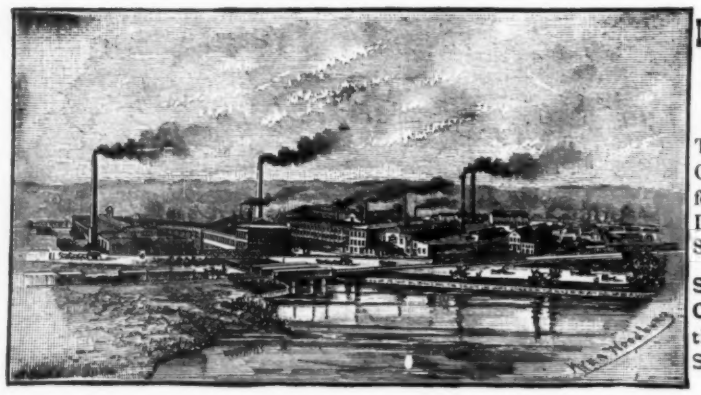
COTTON MACHINERY

Telegraph Address and Railroad Station, MILFORD, MASS. } HOPEDALE, MASS.

Do not fail to visit the World's Exposition at New Orleans, La., and see in operation OUR NEW and IMPROVED MACHINERY for ROVING, SPINNING, SPOOLING, WARPING and TWISTING.

Washburn & Moen Manufacturing Co., Worcester, Mass.

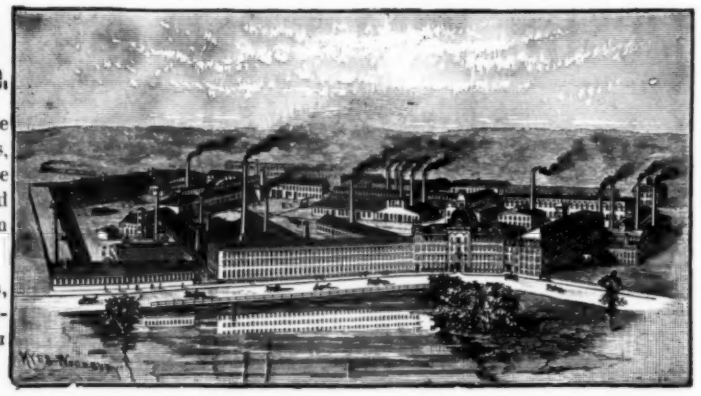
Wire Drawers, and Manufacturers of Iron and Steel Wire of Every Description



Iron and Steel Telegraph and Telephone Wire.

Patent Steel Wire Bale Ties, Pump Chains, Chain Wire, Steel Wire for Springs, Needles and Drills, Watch Main Springs.

Send for Price-Lists, Circulars and Descriptive Pamphlets on Our Specialties.



NEW YORK WAREHOUSE:
21 Cliff Street,
New York City.

GLIDDEN PATENT STEEL BARB WIRE.

The Best Fence Material in Use. For Sale by Special Agents and Hardware Dealers in all Parts of the United States.

Proof against Fire, Wind and Flood.

CHICAGO WAREHOUSE:
107 Lake Street,
Chicago, Illinois.

BALTIMORE

Manufacturers' Record.

Published Every Saturday by

BIGSBY & EDMONDS.

R. H. Edmonds. J. W. Bigsby. Wm. H. Edmonds.

R. H. EDMONDS, EDITOR.

——OFFICE,——

71 and 73 Exchange Place, Cor. Commerce St.,

——**BALTIMORE.**——

NEW YORK BRANCH OFFICE:
Room 6, No. 118 Fulton Street,
J. W. BIGSBY, Resident Partner.

——SOUTHERN OFFICE, ATLANTA, GA.——
I. W. AVERY, Manager.

JAMES L. ELY,
Advertising Agent for New York and Vicinity.
Room 14, 29 Park Row, New York.

Price of Subscription Per Year in Advance:

(POSTAGE INCLUDED.)

TO UNITED STATES AND CANADA, $3 00
OTHER COUNTRIES, - - - 4.50

ADVERTISING RATES:

One square (14 lines Agate, 1 inch)	1 time		$ 1.50
" " " " "	4 "		5.00
" " " " "	3 mos.		10.00
" " " " "	6 "		18.00
" " " " "	1 year		32.00

For advertising on outside pages add 50 per cent. to the above rates.
Reading Notices 50 cents per line each insertion.

BALTIMORE, MARCH 7, 1885.

CORRESPONDENCE relating to the manufacturing, mining, lumbering and all other material interests of the Southern States is solicited. Reaching so many capitalists in all parts of the United States seeking profitable investment in the South, the MANUFACTURERS' RECORD offers an excellent chance for the people in that section to place the advantages of each locality before those likely to be interested. We will take great pleasure at all times in telling what has already been accomplished in the South, and showing up the opportunities of doing still more.

THE Tennessee State Senate, by a vote of 22 to 9, has passed a bill repealing the Railroad Commission law, and, if the House concurs in this, one great stumbling block in the way of Tennessee's progress will be removed. It is gratifying to see that the legislators of that State appreciate the importance of encouraging railroad building, and we trust that other States will follow this most excellent example.

MR. EUGENE MOREHEAD, a banker of Durham, N. C., writes to the MANUFACTURERS' RECORD, referring to a short editorial note lately published about the growth of Durham: "Your recent notices have brought many inquiries as to our town. Our future is very bright." Thus the work of the MANUFACTURERS' RECORD is steadily aiding in building up the South.

A Bright Material Future.

The leading industries of the country, which have been nearly paralyzed for the past two years, are looking up again; money is being freely withdrawn from banks and safety deposit vaults for legitimate investment, and all the current evidences point to a speedy return of confidence and prosperity. Such a hopeful state of affairs promises golden things for the Southern States if the Southern people will only display pluck, energy and enterprise while yet the boom is new! The capital of the East, North and Europe has been looking this way for a number of years, and but for the political agitation in the past would certainly have taken a heavy interest with us long ago. The situation had become settled and capital assured of welcome, fair treatment and profitable returns when the late depression commenced. At that time there was a very general tendency toward Southern investment, and that tendency may now be realized. Taking the South in the aggregate it has suffered less from the hard times than any other portion of the United States.—New Orleans *Times-Democrat.*

While a "boom" is not to be desired, yet there are good reasons for believing, as the Times-Democrat says, that better times are returning and very soon capitalists will be more ready to make investments than for several years. The South even during the extreme depression, which at last seems to be passing away, has attracted a very large amount of Northern and foreign capital and now, with proper efforts, still more liberal investments of outside money can be secured by proper energy and enterprise. Men and money are not, however, likely to go where there is no sign of business activity or push, and so the towns or the States that make no effort to show up their advantages and resources, will not be apt to find much increase either in their population or wealth.

An Important Move.

A dispatch from Birmingham says that the Pratt Coal and Coke Co., of Alabama, have purchased 6-13 interest in the Sheffield Land and Iron Improvement Company's property, and the latter company have purchased the same interest in the former company's property. The Birmingham and Sheffield railroad will be built to the northern terminus of the Pratt railroad, which is ten miles from Birmingham, and the Sheffield trains will run into Birmingham over the Pratt road. The Pratt Company own many thousands of acres of fine coal lands along the proposed route of the Birmingham and Sheffield road, and upon the completion of this road coal from the Pratt Mines can be put in Western markets at reduced prices on account of water transportation. While the full details of this scheme have not yet been made public, it looks as though it was destined to give great impetus to the development of Alabama's mineral resources.

ADVERTISERS wishing to reach the manufacturers of all classes, mining companies, steel, iron and hardware dealers of the entire South, cannot find a better medium than the BALTIMORE MANUFACTURERS' RECORD. We are always prepared to furnish proof of our claims as to circulation.

Ten Years of Southern Progress in Stock-Raising.

It is not alone in industrial matters that the South is making great progress; in her farming interests there is also a decided improvement, and, while the MANUFACTURERS' RECORD is, of course, primarily an industrial journal, yet it is devoted to the development of every material interest of the South, and hence we give to-day some remarkably interesting facts showing how the Southern States are advancing in other than manufacturing and mining affairs.

As the growth in wealth and population of the South must ever depend very largely upon her agricultural interests, a few statistics showing the progress made since 1875 in stock-raising, an industry for which the South possesses almost unequalled advantages, and the importance of which has not yet been fully appreciated, even by the Southern people themselves, will be of interest. The progress has been very satisfactory and the increase in the number and value of farm animals in the South, between 1875 and 1885, is doubtless far greater than is generally supposed. Another very gratifying feature of this business is, that while the average value of live stock in the North is much less now than in 1875, owing to the general decline in prices of everything, yet in the South there is a decided increase in value, (except in sheep) due in large part we think to the great improvement in the grade of stock now raised as compared with ten or twelve years ago. This improvement has been very marked, and in the place of the "razor-back" hog and the "scrub" cow will now be found the best breeds known. The increase in the number of farm animals since 1875 is strikingly shown by the following statistics:

NUMBER OF HORSES AND MULES IN THE SOUTH.

States.	Horses. 1885.	Horses. 1875.	Mules. 1885.	Mules. 1875.
Maryland	125,244	105,505	12,967	11,000
Virginia	229,285	194,920	34,342	29,800
North Carolina	141,167	139,700	85,596	51,700
South Carolina	62,167	56,900	70,415	41,700
Georgia	105,776	118,300	143,843	96,200
Florida	28,562	16,700	11,558	9,600
Alabama	120,924	104,400	131,038	101,400
Mississippi	122,700	89,100	144,620	96,100
Louisiana	111,856	76,300	75,830	79,900
Texas	933,516	770,400	164,033	110,700
Arkansas	166,299	158,900	106,838	83,400
Tennessee	282,945	318,000	183.537	101,900
West Virginia	129,040	111,900	6,349	2,400
Kentucky	371,878	364,700	116,061	85,000
Total	2,931,359	2,625,705	1,287,037	903,800

NUMBER OF SHEEP AND HOGS IN THE SOUTH.

States.	Sheep. 1885.	Sheep. 1875.	Hogs. 1885.	Hogs. 1875.
Maryland	172,022	141,200	309,142	233,500
Virginia	477,450	356,400	795,687	589,800
N. Carolina	488,350	283,900	1,432,599	758,300
S. Carolina	117,641	142,700	567,181	275,900
Georgia	532,547	371,200	1,597,937	1,300,700
Florida	97,951	37,800	307,328	175,400
Alabama	343,925	185,900	1,351,752	755,900
Mississippi	281,738	151,800	1,224,388	792,900
Louisiana	121,234	68,800	563,874	222,600
Texas	7,558,461	1,691,400	2,233,081	1,090,000
Arkansas	225,020	192,400	1,659,181	901,200
Tennessee	635,558	341,700	2,011,568	1,026,400
W. Virginia	637,665	544,500	416,133	218,400
Kentucky	950 761	683,600	2,052,665	1,604,300
Total	12,640,323	5,193,300	16,532,516	10,035,300

NUMBER OF MILCH COWS, OXEN AND OTHER CATTLE IN THE SOUTH.

States.	Milch cows. 1885.	Milch cows. 1875.	Oxen and other cattle. 1885.	Oxen and other cattle. 1875.
Maryland	128,493	100,700	139,592	119,300
Virginia	247,807	227,000	432,452	397,500
North Carolina	241,369	201,000	427,898	313,200
South Carolina	141,895	159,300	216,880	186,700
Georgia	344,458	265,100	610,811	400,900
Florida	46,975	66,800	565,000	363,400
Alabama	282,465	168,200	432,090	327,300
Mississippi	272,081	174,600	416,294	307,100
Louisiana	148,848	89,600	258,023	171,900
Texas	700,876	500,100	4,234,923	2,343,700
Arkansas	268,062	160,900	429,294	261,300
Tennessee	320,017	225,700	466,084	323,700
West Virginia	164,606	125,500	289,519	235,200
Kentucky	304,720	244,700	503,877	389,600
Total	3,612,673	2,709,200	9,423,337	6,140,800

These figures show a rapid progress in the live stock interests of the South, and demonstrate beyond question the advance that is being made by that section in producing its own beef, bacon and mutton, and they are particularly instructive when compared with the live stock statistics of the balance of the country, as they prove, despite the general belief to the contrary, that in the rate of progress in this interest, in proportion to population, the South makes a very creditable exhibit. In the number of horses the increase has not been so large, the South now having 306,000 more than in 1875, while in the rest of the country the gain has been 1,500,000; the percentage of increase in the South, however, was not much smaller than in the other sections. There are now 1,972,569 mules in the United States, Missouri heading the list with 196,866, Tennessee following second with 183,537, and Texas third with 164,000. The South has nearly two-thirds of all the mules in the country, and since 1875 her increase has been 384,000 out of a total increase of a little less than 700,000. In sheep and hogs the increase in the South has been very great, and as the advantages for raising these animals are in many respects superior to what can be found elsewhere, there is no doubt but that the next ten years will witness a still larger gain in the number of sheep and hogs raised. As soon as the Southern people appreciate the profit of sheep raising sufficiently to banish the thousands and tens of thousands of worthless dogs (not the good ones) that now do so much damage to this business, sheep will receive much greater attention than ever before. In 1875 the South had 5,193,300 sheep out of a total in the whole country of 35,935,300, or only one-seventh; the South now has 12,640,323 out of a total of 50,360,243, or one-fourth of the total number. The increase in sheep for the country at large between 1875 and 1885 has been 14,325,000, of which 7,450 000 is in the South. Thus the Southern States, which have only one-third of the population of the country, even including the colored people whose live stock interests are exceedingly small, made a much larger increase in the number of sheep than all the rest of the country combined. While a considerable part of this gain is in Texas, yet there has been an increase in every State with the exception of South Carolina. Maryland shows a gain of 30,000; Virginia, 120,000; North Carolina, 205,000; Georgia, 160,000; Florida, 60,000; Alabama, 160,000, Mississippi, 130,000; Louisiana, 53,000; Arkansas, 33,000; Tennessee, 290,000; West Virginia, 93,000, and Kentucky, 270,000.

One of the most serious hindrances to the prosperity of Southern farmers, and thus naturally to the whole South, has been, as some one has so tersely put it, that they "keep their smoke houses and corn cribs in the

West." The amount of money annually spent by Southern farmers for Western corn and bacon is enormous, almost surpassing belief, and when they produce, as they can readily do all of these that the South can consume, that section will increase in prosperity as never before. It is very gratifying, therefore, to see that in this line good progress is being made. In 1875 the South had 10,035,300 hogs, in 1885 it had 16,532,516, an increase of 6,500,000. The increase in the rest of the country was 12,500,000, the total increase being 19,000,000; so it will be seen that as the South has one-third the population, and the increase in the number of her hogs is just one-third of the total increase in the country she is fully maintaining her position, notwithstanding what has been considered the remarkable growth of the Western pork business. As surprising as it may seem these statistics show that the number of hogs in proportion to population is greater in the South than in the balance of the country,—the New England and Middle States having comparatively few and being compelled to draw much of their supply from the West.

In 1875 the country had 11,085,400 milch cows, 2,709,200 of them being in the South; in 1885 the aggregate for the country is 13,904,722 of which 3,612,673 are in South. The increase for the whole country has been 2,800,000, the gain in the South being a little over 900,000 or one-third of the total, so that in proportion to population the increase in the number of cows in the South is equally as great as in the other sections. The advantages for stock-raising and dairying possessed by almost, if not every one of the fourteen Southern States, are not surpassed elsewhere in the United States and are unequalled except in rare cases. With a mild climate that largely reduces the cost of food for cattle, and with an abundance of the best grasses wherever proper attention is given to the matter, it is quite positive that the cattle interests of the South will rapidly grow in extent and value.

Of oxen and other cattle there are now in the country 29,866,573 against 16,785,300 in 1875. Of these the South now has 9,423,337 compared with 6,140,800 in 1875, an increase of 3,300,000.

The total number of farm animals in the South in 1875 and 1885, compare as follows:

Kind.	1885.	1875.
Milch Cows	3,612,673	2,709,200
Oxen and other cattle	9,423,337	6,140,800
Sheep	12,640,323	5,193,300
Hogs	16,532,516	10,035,300
Horses	2,931,357	2,625 705
Mules	1,287,037	903,800
Total	46,427,243	27,608,105
Increase	18,819,138	

The values of these animals in the two years named were:

Kind	1885.	1875.
Milch Cows	$80,304,197	$54,144,684
Oxen and other cattle	143,842,425	73,641,099
Sheep	25,054,959	11,617,020
Hogs	63,582,089	45,009,006
Horses	181,800,553	148,736,368
Mules	105,041,025	69,262,695
Total	$599,625,248	$402,410,872

As shown by these figures the value of live stock in the South at present foots up the enormous sum of $599,625,248 against $402,410,872 in 1875, or in other words Southern farmers and live stock raisers now have $195,000,000 more invested in farm animals alone than they had in 1875.

Southern agricultural interests are progressing. The casual observer may not have noticed the gradual change that is going on, but these figures which are the official statistics of the United States Agricultural Department, show that the improvement is very decided. Compiling the values by States we have:

STATES.	1885.	1875.
Maryland	$ 22,813,783	$17,931,896
Virginia	39,608,536	31,641,779
North Carolina	33,856,296	24,532,960
South Carolina	20,601,015	15,966,065
Georgia	41,406,898	31,816,919
Florida	10,408,305	6,590,542
Alabama	33,827,420	26,522,673
Mississippi	35,505.179	27,106,721
Louisiana	21,108,191	16,083,126
Texas	153,775,549	69,648,935
Arkansas	34,159,333	23,5.5,700
Tennessee	58,140,574	41,556,367
West Virginia	24,098,037	17,861,106
Kentucky	70,226,132	51,636,083
Total	$599,625,248	$402,410,872

The aggregate increase, as will be seen from these figures, is made up of gains in every State. The showing may well be regarded with profound satisfaction by every one interested in the prosperity of the South.

The aggregate value of all live stock in the United States on January 1st, 1885, was $2,456,425,983, of which almost exactly one-fourth or $599,625,248 was in the South. When the enormous live stock interests of the Western States and territories, as well as of the New England and middle States are taken into consideration, the South is to be congratulated that the value of her live stock is one-fourth of that of the whole country.

The Proposed Extensive Development of Iron Property. A Good Scheme.

LEXINGTON, VA., Feb. 25, 1885.

Editor Manufacturers' Record:

I am making an effort to combine all the owners of iron property contiguous to Balcony Falls into a scheme for building first, a large furnace or furnaces upon a central and convenient site, and then factories to work up the pig into shapes suitable for market, under a charter obtained from the legislature of Virginia at its meeting last winter. The owners of the various ore banks would thus find sales for their ores and the furnace company secure an ample supply of ore of various sorts, which could be combined in the proper proportions to produce the best results. I have succeeded in exciting a good deal of interest in the matter, and when the business of the country revives, so as to promise a fair return from invested capital and labor, I have little doubt that a splendid enterprise can be consummated at Balcony Falls. The site is right at the junction of the great valleys of the James and North rivers, with water power procurable from either; with railroad on three sides of it leading to all points of the compass; in the very heart of the iron belt with abundant limestone on the place; with coal and coke within easy access by three competing lines of railroads; with the most beautiful location for a manufacturing city; with a rich soil to feed a city and a salubrious climate; it would seem it only needs a time when the activities of the human mind are in operation to bring into existence all I am working for and more. But we poor devils in the South are poor; too poor for our good and o can only point out and offer our advantages to others. Col. A. S. Buford and I own this valuable site,—1,600 acres,—and we propose to take part in developing it. Can't you help us? Your paper and the Industrial South are doing more to build up our waste places than all the political papers of both parties. I wish you God speed. We are going to have a big time down here in the South and that before long. Our poverty will not always keep us poor. We can produce cheaper and that will surely win.

Very truly yours,

J. D. H. ROSS

Notes ❊ From ❊ Dixie.

BY CHAS. H. WELLS.

Westminster, S. C., in Oconee county, offers some inducements to wide-awake, energetic men. The finest kind of dogwood lumber, suitable for shuttles, *et cetera*, is found in abundance in that locality, and can be bought very cheap. To a man with about $5,000 capital, this is a fine chance, as the demand for dogwood is always considerable. There is a market for the lumber, either in Atlanta or in the North.

* * *

A gentleman from Penn Yann, N. Y., writes to ask: "What are the best kinds of Southern securities for me to invest in? What rates of interest can I get?" In reply: The safest investments are small loans upon real estate. The rate of interest is eight, ten and twelve per cent. a year. There are a good many bonds that bring eight per cent. and that are as good as United States bonds, but they cannot be bought for less than one or two per cent. premium, and are hard to find now-a-days, because the speculators have gathered them all in. There are some railroad stocks, too, that pay six per cent. annual dividends.

* * *

Among the latest additions to art in railway advertising, are the East Tennessee, Virginia & Georgia's folder "Guide to Inaugural," and the Savannah, Florida & Western Railroad's little book on Florida. For the former, address B. W. Wrenn, general passenger agent, Knoxville, Tenn.; for the latter, write to James L. Taylor, Esq., general passenger agent, Savannah, Ga. Both are replete with cleverly-executed illustrations, and are elegantly gotten up.

* * *

The editor of a Lexington, North Carolina, paper goes for my scalp because I said in a recent article that "2,000 convicts" had been engaged to work on the Asheville & Spartanburg Railroad. It probably never occurred to my brother of the quill that the number intended was 200 instead of 2,000. The compositor put in one cipher too many, hence the mistake. And by the way, Major Bomar, of the Western North Carolina Railroad, has begun to build the stockade for these same convicts, so it begins to look as if the R. & D. people really are going to complete the road.

* * *

The Raleigh *Chronicle* takes exception to the statement made in these "Notes" that real estate in Buncombe county had trebled in value since last spring. I spent three weeks in Buncombe only a month ago; made especial enquiries at Weaverville, Alexander's, Fairview, Long's, Cooper's, Asheville, and other places, and the statement I made is borne out by my investigations. Land that could have been bought in February, 1884, for $5 an acre, cannot now be bought for less than $15. But, of course, the editor of the *Chronicle*, down there in Raleigh, knows a heap more about it than one who has been "on the spot." I do not say that real estate *in* Asheville has trebled. Property there has been held at prices far above what it is worth for two years. The captious editor will notice that the article did not say that *all* real estate in the county had trebled in value.

* * *

The legislature of North Carolina has refused to grant an appropriation of $3,000 asked for by Colonel John A. Sloan, to aid him in the publication of his book, "History of North Carolina in the War Between the States." The Hickory *Press*, commenting on this action, voices the sentiments of most of the people of the State when it says: "The people of North Carolina do not pay taxes to publish literary works, however meritorious. Such works must depend for their encouragement on the appreciation of the reading public." Mr. Sloan has appealed to the masses for contributions to aid him in his work, which is heartily endorsed by Mr. Jefferson Davis.

* * *

Mr. Overman, of Salisbury, member of the General Assembly of North Carolina from Rowan county, has introduced a bill creating a commission to investigate the question of industrial education. This is a step in the right direction; but why delay the establishment of the school two more years by requiring the commission to report at the next session? Why not appropriate funds *now* to begin the school with? Major Finger, of Newton, Superintendent of Public Instruction, and the president of the University of North Carolina, will constitute the committee.

* * *

The Midland Railroad, of South Carolina, which has frequently been mentioned in the "Dixie Notes," has at last died a natural death in the City by the Sea, as Editor Dawson loves to term Charleston. It will be many years before Northern capitalists will put money into railroads in South Carolina, unless the railroad commission law be repealed. In North Carolina, where no such disgrace to justice as a railroad commission exists, there are no less than nine new railroads projected, and most of them backed by Northern capital too. The present railroad laws of South Carolina are preventing the march of progress in that State. How long will it be before the legislature will have the courage to repeal the law?

* * *

From one of the western exchanges I clip the following interesting table, showing the value, annually, of the principal products of the country:

Forestry	$700,000,000
Corn	679,714,499
Wheat	474,291,850
Hay	371,811,084
Cotton	280,266,342
Oats	150,243,565
Gold and silver	74,400,000
Coal, anthracite and bituminous	94,500,000
Iron ore	20,470,000
Total mineral, precious and not	218,385,452

* * *

Probably not more than one man out of a hundred would have supposed that the value of the forestry products exceeded all others. Now the point I wish to make is this: The South contains almost three-fourths of the entire timber now standing in the United States, and must, therefore, in time be the centre of one of our greatest industries. Investments in timber lands in the Carolinas are, consequently, safe, and are sure to yield a handsome return in a few years—*ce va sans dire*. Some of the leading investors of New York and Philadelphia have recognized this fact and they have bought (and are now buying) large tracts of timber land in the Carolinas, Georgia and Alabama. Among the purchasers are such men as General Samuel Thomas of the Seney syndicate, James F. Martin, the Brooklyn millionaire, and the Coxes, of Phiadelphia.

* * *

DRIFTWOOD.

Greenville, S. C., has made arrangements to have a United States Signal Service Station there to warn the farmers of approaching cold waves.——More tobacco will be raised next year in Catawba county, N. C., than has ever before been grown there.——The small-pox scare in some of the smaller towns along the Georgia Railroad has all died out.——Lula Hurst, "the Georgia wonder," made $80,000 while on her recent trip through the North. It is said that among the heavy things she has lifted, by means of her wonderful magnetic power, was a heavy mortgage on her father's farm near Collardtown.——Mr. R. V. Hayden, of the Philadelphia Press, whose letters from Ireland created such an impression in the Quaker City, is in Atlanta. He will write up the Sunny South in graphic style, especially the abominable system of leased convict labor!——Sam. W. Small, whose contributions over the *nom de plume* "Old Si" have attracted so much attention in the North, has renounced journalism and is studying for the ministry.——Asheville, N. C., is making arrangements to build a new ice factory.

48-inch Cylinder Combination Cotton Card.

This card consists of a main cylinder 48 inches diameter, 37 inches long; a pair of feed rolls 1 3-8 inches diameter; a licker-in 7 inches diameter; carrier 7 inches diameter; a series of grids under the main cylinder; 3 sets of worker and stripper rolls below the centre on the back side; 26 top flats with Wellman self-stripper; a doffer 18 inches or 22 inches diameter, with a fast running comb, all connected together and properly arranged upon a suitable frame.

The lap and delivery are both at the same end of card. The cotton passes from the feed rolls to the licker-in and carrier on to the main cylinder, then again it is passed over a series of grids placed directly under the centre of the cylinder; the heavy refuse matter falls through the spaces between the grids while the fibre adheres to the cylinder. This is based on the general assumption that the sooner the heavy matter is got rid of the better for the following processes. The cotton is then worked by the worker and stripper rolls where it is straightened and cleaned of more impurities. There is then a little space between worker and stripper rolls and the top flats where the cotton is allowed time to regain its normal position before entering between the cylinder and top flats. Here the peculiarity of the stripping motion is its adaptability to the purpose for which it is intended, this being capable of considerable variation according to circumstances by trifling changes. The doffer, fast comb and cylinder are all solidly arranged, easy of access and calculated to do the work clearly, without over draft or stretching. The space between last top flat and point of contact between cylinder and doffer is covered by what we term a fibre layer. This prevents the cotton from flying off the cylinder and the cotton is laid on to the doffer from the cylinder in its normal state. It also prevents all dust or dirt from flying off the cylinder on to the doffer.

The space between cylinder and frame and cylinder and arch is pratically closed, thus preventing "rollings" or "flyings" which are so common on other cards. The arrangement of the doffer in combination with the workers is to make the driving motion positive, and, with the doffer, control it all, —the whole being driven from the railway shaft, making a complete and systematic card. All the adjustments are easy of access and the general construction and detail of the card are so simple that it requires no more skillful help to run it than is required for the 36-inch common top flat card.

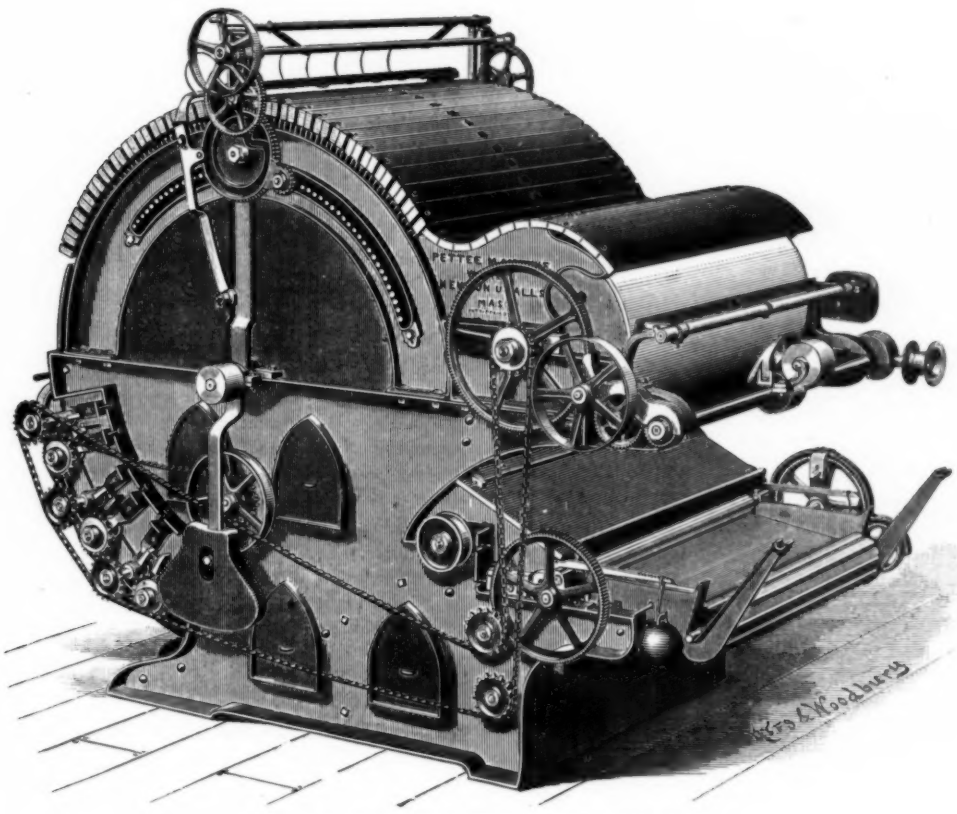
The capacity of the card is about 80 lbs. per 10 hours, of good carded cotton, for numbers 32 to 36 yarns. For coarser numbers a considerably increased amount can be well done, but we take as a standard the best yarn from single carding for strictly extra print cloths and fine standard sheetings.

The power required is but little in excess of the 36-inch common top flat card.

The card is now at work in many of the best mills in the country; it is used on coarse and fine numbers and has been thoroughly tested, and is now in use by some of the cotton hosiery men who speak highly of its adaptability.

The following mills now have these cards in operation; Flint Mills, Fall River, Mass., New Hartford Cotton Mfg. Co., New Hartford, N. Y., O. S. Porter, Covington, Ga., Roote & Waterman, Cohoes, N. Y., Robert Draper, Canton, Mass., Lehman, Abraham & Co., New Orleans, La., Pelzer Mfg. Co., Pelzer, S. C., Sibley Mfg. Co., Augusta, Ga., Chicopee Mfg. Co., Chicopee Falls, Mass., and Wm. J. Hooper & Sons, Baltimore, Md

For further information address R. P. Snelling, Treasurer, 40 Water Street, Boston, Mass., or the Pettee Machine Works, Newton Upper Falls, Mass., and all inquiries will be promptly attended to.



48–INCH CYLINDER COMBINATION COTTON CARD.

THE Pope Manufacturing Company, of Boston, the makers of the Columbia Bicycles and Tricycles, have just opened a branch house at No. 179 Michigan avenue, Chicago. Major William M. Durell, who will assume the management of this branch, is familiar with the bicycle trade, having had for several years the New York management of the Western Toy Company's business. The Major also has quite a military record. He entered the Confederate Army when a lad, fought in the battle of Bull Run, and to the close of the war. He was on General Ewell's staff, and lost an arm in the battle of Spottsylvania. The Chicago branch house will carry a large and full assortment of Columbia Bicycle and Tricycles, the machines manufactured by the Western Toy Company and R. P. Gonnully, and a complete line of parts and sundries.

Southern Competition with Northern Mills.

The debate Thursday before the Judiciary Committee of the Rhode Island Senate on the ten-hour-law question brought out some interesting and suggestive facts. Ex-Governor Cutler, after expressing his reluctance to oppose the petition of a certain class of citizens of the community who presented a grievance, said:

"If we could have national law for ten-hour labor it would have my hearty support —that is, if we could be placed on an equal footing with all manufacturers throughout the country. The number of spindles has been greatly increased during the past two years—especially in the South, with only one object (I regret to say it, but I must), only to beat the Northern mills. The Southern mills are selling their products to-day in the markets 15 or 20 per cent. cheaper than we of Rhode Island can afford to. It is a sharp and bitter competition, but we are trying to meet it; and we are better off toward that end than we were a year ago. But it has been with money lost to the manufacturers. The manufacturers would be better off to-day if they had closed their mills one year ago. We have all we can possibly do to prepare to meet Southern competition, where they can run fourteen hours per day."

Mr. Charles H. Merriman said he desired to emphasize Governor Cutler's point as to Southern competition. The Providence Journal reports his remarks at length, and from that report we take the following:

"He was not here to raise a bugaboo, but facts must be considered. He heard some interesting and suggestive testimony a short time ago from a friend of his who is a truthful, likely man, and is now superintendent in a South Carolina cotton-factory. This gentleman was very sanguine of the future of cotton manufacture in the South, because of the very favorable circumstances. He assured Mr. Merriman that the Southern manufacturers were going to make it very warm for the northerners. In the first place, living for the operatives in the South is very cheap. There are a great many people who have nothing to do." * * * *

"The Southerners run their mills right through the day, not stopping at noon even, such operatives as choose lunching as they tend the machines. Their fuel to heat their mills—for all these things count—don't cost as much in a mild climate. They can get wood for the cutting—about 75 cents a cord. Cotton is brought from the field in wagons, saving rail transportation, compress, commission, etc., expenses—a saving of 1½ to 2 cents per pound. They can deliver goods as cheap in St. Louis or Chicago as in New York. It would betray confidence to state exactly what the cost of Southern manufacturing is, but the figures are enough to stagger us of the North. We shall not be able to make coarse goods here in the North much longer anyway, and the Southerners are even confident of competing with us in the finer grades. The labor they hire is not poor 'white trash,' as we so often suppose, but they say the operatives they find are intelligent, quick to learn, and capable. Northern manufacturers have all they can do now to meet this Southern competion without more embarrassments than they already labor under. If we are to have legislation on the hours of labor, let it be in Washington and not in Rhode Island. If we could have a national ten-hour law Rhode Island manufacturers would heartily support it; and then if Yankee ingenuity and pluck could not win in the race, with equal legislative advantages, we should go down by the force of natural circumstances, and we could not complain."

And now the question arises: Would the Northern mills gain anything by a national labor law Nothing that we can think of. The South would continue to have all the advantages it now has in the matters of climate, length of daylight, cheapness of living, cheapness of fuel, proximity of raw material to the mills, and transportation. The main point, however, to which we would call attention is the statement of Mr. Merriman that the Southerners are even confident of competing with the North in making the finer grades of goods. If the manufacturing centres of the South will see to it that the operatives whom Mr. Merriman speaks of as "intelligent, quick to learn, and capable," have access to schools of art and design, in which industrial art is a specialty, this confidence will not be misplaced. The only thing in which the South cannot already compete with the North is skilled labor, and that can be acquired through a system of industrial education.—Dispatch, Richmond, Va.

List of Patents

The following Patents were granted to citizens of the Southern States, bearing date Feb. 24, 1885. Reported expressly for this paper by Louis Bagger & Co., Mechanical Experts and Solicitors of Patents, Washington, D. C.

Babington, J. P., Shelby, N. C. Tympan-sheet and compound for same.....312,694
Bauer, A. H., Baltimore, Md. System of electric-lighting by secondary batteries.....312,953
Benoit, Joseph, New Braunfels, Texas. Windmill 312,795
Blount, A. C., Pensacola, Fla. Stave and cask.....312,955
Byrne, Patrick, Nashville, Tenn. Spring-motor.....312,703
Carpenter, S. L., Rossville, Tenn. Bale-band tightener.....312,704
Cashin, T. D., Hagerstown, Md. Lamp shade holder.....312,813
Clanton, S. H., Quitman, Ga. Plow.....312,817
Edwards, L. R., Franklin, Va. Peanut-cleaner.....312,617
Egerton, C. C., Baltimore, Md. Carriage-standard.....312,618
Forister, J. H., Flatonia, Tex. Motor.....312,990
Hadley, Jno., Alexandria, Va. Tuyere-iron..312,628
Joo, Morris, Roanoke, Va. Car-coupling....312,861
Ludwig, R. P., Saumsville, Va. Drill-tooth regulator and compresser for seeders.....312,873
Martin, James, Louisville, Ky. Saloon-hopper tube for keeping clean saloon-hoppers in railway cars, &c.....312,876
Mason, C. T., Jr., Sumter, S. C. Cotton-stem picker.....312,647
Mayfield, W. D., Fort Worth, Tex. Feeding-chute for stoves.....312,736
McLane, Reed A., Queen City, Tex. Signal-valve for boilers.....312,741
Nickel, J. M., Baltimore, Md. Curtain fixture.....312,886
Pense, Merry L., Lexington, Ky. Safety gas burner.....312,892
Rodes, Tyree, Wales, Tenn. Tire-tightener..312,900
Rye, Edgar, Albany, Texas. Car-coupling...313,026
Thornton, A. E., Atlanta, Ga. Treating oleaginous seeds for the extraction of oil.....313,032
Vaughan, E. J., Louisville, Ky. Carburetor..312,774
Vaughan, G. A., Lockesburg, Ark. Attachment to stoves for heating air.....312,678
Whitlock, J. G., Richmond, Va. Stove-door handle.....312,940
Winship, George, Atlanta, Ga. Cotton-gin feeder.....313,038
Yellott, George, Towson, Md. Centrifugal pump.....312,788

CONSTRUCTION DEPARTMENT.

WE PUBLISH, every week, a list of every new factory, of whatever kind, projected anywhere in the South; every railroad undertaken, and every mining company organized. This information is always fresh, and, by enabling manufacturers to correspond with the projectors of such enterprises before their supplies of machinery have been purchased, is of great value. Manufacturers will find it to their interest to read this department carefully each week.

ALABAMA.

M. M. Tye, of Elba, Ala., has received contract to build a $5,780 court house at Ozark, Ala.

A four story hotel is to be built at Eufaula, Ala., work on foundation having commenced.

W. E. Yancey, Talladega, Ala., contemplates adding a flour mill to his cotton seed oil mill.

Bids are invited till March 14 for building a court house at Brewton, Ala. Judge N. R. Leigh can give particulars.

It is reported that Wm. Berney, Birmingham, Ala., will erect a bank building.

A company has been organized at Birmingham, Ala., as the Curry Press Co., capital $1,000,000, by B. J. Curry, J. J. Dement and W. H. Scuggs, of Huntsville, Ala., and J. J. Hinds and Wm. H. Smith, of Birmingham; officers are B. J. Curry, Huntsville, president, and L. W. Day, Huntsville, secretary. Mr. Curry is already engaged in manufacturing cotton presses at Huntsville, but it is contemplated some time in future to establish extensive works at Birmingham, for making presses for cotton, tobacco, &c.

The Mobile, Denver & Pacific R. R. Co., previously reported, has been incorporated in Alabama to run from Mobile to the Mississippi State line and thence by other combinations to perfect a straight line to Denver. The incorporators are L. B. Goelet, H. Chamberlain, J. G. Perry, E. O. Zadek, J. C. Ruse, Jos. Thompson, Jr., I. A. Michael and Oliver Caldwell, of Mobile, B. Adams, Baldwin county, W. H. Hardy, of Meridian, J. S. Hamilton and Wirt Adams, of Jackson, Miss.

ARKANSAS.

The Arkansas Manufacturing Co., capital $75,000, has been organized at Pine Bluff, Ark., to manufacture lumber, &c. President E. B. Moore, Secretary E. D. Nix.

Bowman & Craig, Corning, Ark., reported last week as having put up a saw mill, have not yet finished it; will be ready for work about May 1st.

Stewart & Hofner, Rondo, Ark., have nearly completed their flour mill.

Peter N. Goetz, Corning, Ark., whose grist mill and gin was burned last week (loss $1,600) will rebuild.

Thomas Ketchum, Fort Smith, Ark., will erect a foundry and machine shop.

J. W. Roeder, of St. Louis, has received franchise to build water works on the Holly system at Texarkana, Ark.

FLORIDA.

B. F. Lyons & D. C. Acosta, Ocala, Fla., have ordered machinery for a steam laundry.

It is understood that the Silver Springs (Fla.) Ocala and Gulf Railroad will be put under construction at once. The new officers are Thos. C. Hoge of New York, president, Oscar Tamaguo, New York, treasurer, and Irving Paris, New York, secretary. Taylor & Sanchez, of Gainesville, Fla., are counselors.

Lake City, Fla., will probably build water works.

C. N. Ledwith, Apalachicola, Fla., desires estimates on complete machinery for steam wheel boat. Size of engine to be from 6 to 10 inches cylinder.

A new town is being laid out near Sumpterville, Fla. Northup & King, Sumpterville, will remove their saw mill there.

The Jacksonville Marine Railway Co., Drew, Hazeltine & Livingston, proprietors, Jacksonville, Fla., previously reported, are receiving the machinery for their marine railway.

J. E. Hart, Jacksonville, Fla., will shortly erect a brick block 100x105 feet.

The Union Cigar Manufacturing Co. are erecting a factory at Waldo, Fla.

John P. Carey, Bridgeport, Fla., contemplates establishing a saw mill.

Grant & Race, Palatka, Fla., are erecting a carriage and wagon factory.

J. S. DeMontmollin & Merryday Goodson, Palatka, Fla., will erect a grist mill.

J. H. Morgan, Apalachicola, Fla., reports that a large fertilizer factory will be established in that city.

GEORGIA.

A contract has been awarded to build a railroad from Jessup, Ga., to Hart's Road.

The Etowah Manufacturing and Mining Co., of Georgia, recently sold their mining land and water power to a Rome, Ga., company for $100,000.

J. J. Wall, Haines, Ga., has completed his saw mill.

It is reported that a company has been formed, headed by M. T. Dill, president of the Greenville Land & Lumber Co., Portsmouth, Va., to build a railroad from Jacksonville, Fla., to Millen, Ga. Work to be commenced at once.

G. B. Rooks, of Senoia, Ga., will establish a brick yard at Newnan, Ga., and intends to purchase best machinery.

The court house bonds having been sold, the proposed court house at Cuthbert, Ga., will probably be built very shortly.

The McDowell Gold Mine at Holly Springs, Ga., is being re-opened by a shaft 75 feet deep, projected to cut a vein 4 feet wide that yielded $75 per ton.

KENTUCKY.

M. D. Story, Little Cypress, Ky., contemplates erecting a chair factory.

The Christian County Creamery Co., Hopkinsville, Ky., are preparing to put in their machinery.

The Louisuille & Nashville Railroad Co., office Louisville, expect to erect shops at South Louisville, Ky.

The Kentucky Wagon Co., Louisville, Ky., have purchased ground at South Louisville for new wagon factory.

George Meyers & Vincent Cropper have purchased a flour mill at Grant's Lick, Ky., which will be overhauled and new machinery put in.

A $25,000 skating rink is to be erected in Newport, Ky., on ground leased from John C. Dueber of that city.

G. D. Dalton & Bro., Hopkinsville, Ky., have leased a brick yard and will enter extensively into brick manufacturing.

The Sterling Kentucky Lubricating Oil Co. has been organized at North Middletown, Ky., to bore for oil, &c.

Fred. J. Meyers and others, of Covington, Ky., have organized the Covington Edison Electric Illuminating Co., capital $3,000, for electric lighting.

S. S. Savage & Co., Ashland, Ky., will add a grist and hominy mill to their planing mill.

W. A. Abbott, Murray, Ky., has nearly completed his tobacco factory.

W. H. Davis, Charles Prager & J. H. Poage, Jr., Ashland, Ky., have organized the Ashland Roller Skating Rink Co., capital $5,000, to establish a skating rink.

A company has been organized in Owensboro, Kentucky as the E. C. Berry Distilling Co., with J. W. Slaughter, president and Joseph Perkins, secretary. Will commence operations at once.

The Platinum Light Co., 572 Fourth ave., Louisville, Ky., has been organized to manufacture a new patent lamp.

The Louisville Bridge Co., Louisville, Ky., have received contract to build iron bridge at Nashville, Tenn., for $92,000.

The Louisville Bed Lounge Manufacturing Co. has been incorporated at Louisville Ky. Capital $10,000.

It is reported that the Car Axle Thimble Skein Co. is being organized at Franklin, Ky., with J. S. Black, secretary and T. M. Goodknight, president. Propose to establish work as soon as stock is taken.

Gus Koehler and others, it is reported, will erect works at Newport, Ky., for manufacturing fire arms.

The D. Keefer Milling Co., Covington, Ky., whose flour mill was lately burned, (loss reported nearly $100,000) will commence rebuilding in a few days.

The Edison Central Electric Light Co., capital $25,000, has been incorporated in Covington, Ky., by Henry Worthington, H. H. Hoffman and Archie Stewart, to establish electric light works.

Midway, Ky., expects to have a $10,000 hotel.

LOUISIANA.

The Louisiana Electric Light Co., New Orleans, La., have purchased ground on which to erect their electric light works.

The Carpenter-Ely Manufacturing Co. has been incorporated at Plaquemine, La., capital $30,000 with S. D. Carpenter, president, J. S. Ely, vice-president and E. D. Ely, secretary, to purchase or build saw, shingle or planing mills.

MISSISSIPPI.

Isaac Anderson, Ellisville, Miss., has, about completed his saw and planing mill.

The ice factory previously reported as to be built at Aberdeen, Miss., is being put up by Sa nuel Kaye.

A saw mill, capacity 25,000 feet a day, has been erected at Tuscarola—a new railroad station in Mississippi by W. C. Albertson.

The Progress Machine Works, Meridian, Miss., will enlarge their foundry and machine shop.

A turpentine distillery is to be erected at Ellisville, Miss.

Curphey & Mundy, Vicksburg, Miss., have purchased ground on which they will erect a 2-story planing mill 40x100 feet.

MARYLAND.

George Anderson, Deer Creek, Md., is building a $6,000 flour mill.

John H. White, North-East, Md., will erect a new building for his razor-strop factory.

James Young, Baltimore, intends to erect a large house 26x225 feet.

A company is being worked up in Cambridge, Md., to establish a glass factory. L. S. McNamara, J. B. Isler and Wm. E. Woodroe comprise a committee to organize these works.

Jas. D. Wilson, Greensborough, Md., has finished his new mill.

The Northern Central Railroad Co. have determined to proceed at once with the erection of a large depot in Baltimore, which has been in contemplation for several years. Geo. C. Wilkens, general manager, Baltimore, can give particulars.

Daniel Beckley, Beckleysville, Md., is putting new machinery into his paper mill to enlarge capacity.

Preston's Mill, Deer Creek, Harford county, Md., has been sold by J. H. Preston, of Baltimore, to J. Wise, of Virginia, for $8,600.

A company has been organized in Washington, D. C., by J. V. N. Huyek, W. L. Finley, A. M. Gibson, H. J. Finley and S. T. G. Morsell, as the American Eraser Co.; capital $300,000.

NORTH CAROLINA.

As previously reported, Greensboro, N. C., has been discussing water works, and it is believed that they will be built at a cost of about $40,000. Several contractors have been examining the ground. Application has been made for a charter for the Greensboro Water Supply Co.

M. M. Teague and J. W. Graham, Old Fort, N. C., contemplate establishing a furniture factory.

The new factory to be erected by the Durham Fertilizer Co., Durham, N. C., previously reported, will be 150 feet long. Foundation is already laid.

An ice factory will probably be erected at Fayetteville, N. C., by the proprietor of Anthony's Ice Factory, Charlotte, N. C.

The Salisbury Woolen Mill, Salisbury, N. C., reported as incorporated last week, is the same as Johnson & McNeily, previously reported as intending to establish a woolen mill at Salisbury, N. C. About ready to commence work.

The Hope Mills Manufacturing Co., lately incorporated in North Carolina, as reported, was incorporated by W. C. Houston, of Philadelphia, Pa.

Payne, Lunn & Morris, Winston, N. C., previously reported as intending to establish a tobacco factory, have contracted for the erection of a four-story building 50x100 feet.

I. N. Walker & Lindsay Fornville, previously reported as intending to establish a tobacco factory in Company Shops, N. C., will commence in the spring. The firm will be Walker, Fornville & Sellars.

W. E. Worth & Co., Wilmington, N. C., will erect an ice factory and cold storage warehouse. Have contracted for the building.

T. W. Ford & Co., Henderson, N. C., have finished their tobacco factory and commenced work.

A shoe factory to be built by a Lynn, Mass., business man is talked of in Durham, N. C.

J. A. Shuping, Morganton, N. C., has ordered additional machinery for his garnet mills.

A Pennsylvania company have purchased land in Granville county, N. C., on which they have opened a copper mine.

The Durham Wooden & Woolen Mills, Durham, N. C., previously reported having finished their wood-working factory, will build their intended woolen mill this spring. Building is to be 50x150 feet and a dye house 30x110 feet.

SOUTH CAROLINA.

The property of the Kiawah Phosphate Co., Charleston, S. C., has been sold to R. L. Rylance, of Lancashire, England, who has returned to England with a view of organizing a $500,000 company to work these phosphate beds on an extensive scale.

The Sea Island Chemical Co., Beaufort, S. C., will build a powerful dredge for phosphate mining.

TENNESSEE.

Proposals for furnishing boilers for the pumping station of the Nashville Water Works, previously reported, will be received till March 10. Address Board of Public Works & Affairs, Nashville, Tenn.

Truxal & Dunmeyer, Chattanooga, Tenn., will probably erect a large machine shop in the spring.

Ground has been purchased at Dayton, Tenn., for the erection of a large flour mill. Machinery is being purchased.

The Southern Pacific Oil & Mining Co. has been organized at Cleveland, Tenn., by J. H. Pemberton, Engram Phillips, J. R. Blackburn, G. W. Hargis and J. L. Still, to engage in gold mining, &c.

The Great Southern Marble Co., of Knoxville, Tenn., the organization of which was previously reported, have elected John J. Craig president, and W. B. McMullen secretary and general superintendent. Capital $300,000.

It is reported that S. Fairchild, of Detroit, Mich., will establish extensive iron works and open coal mine at Caryville, Tenn.

Ing & Jackson, Humboldt, Tenn., are building a flour mill; another flour mill is also being built in the same place.

McDowell & Dew, Columbia, Tenn., are making arrangements to organize a creamery company.

The Memphis Grain Elevator & Manufacturing Co., capital $65,000, has been organized in Memphis, Tenn., by John K. Speed, W. J. Chase, Louis Hanauer, Napoleon Hill, J. C. Neely and Robert Galloway; will probably erect a grain elevator.

J. J. Stephens, Memphis, Tenn., contemplates starting a brick yard.

Fuqua, Harris & Co., Trezevant, Tenn., have about completed their flour mill at a cost of $9,000.

A company has been organized in Chattanooga, Tenn., with Sam'l A. Cunningham as president, to build a large soap factory with capacity of 30,000 pounds soap a day.

The Chattanooga & St. Elmo Railroad Co., previously mentioned, has been chartered to build a road from Chattanooga, Tenn., to Lookout Mountain. The incorporators are G. E. Downing, S. B. Moe, Z. C. Patton, J. C. Rawlings and others.

Property has been leased of S. T. Atkin, Knoxville, Tenn., for establishing a carriage and buggy factory.

S. Singer, H. C. Bennett, W. Rich, P. Byrne, J. Bloomstein, M. T. Bryan, J. Hirsh, T. O. Treanor, H. O'Brien and S. Leiberman have organized in Nashville, Tenn., the Byrne Manufacturing Co. for the manufacture of spring motors to run sewing machines, dental machines and other light powers, and also for the purpose of manufacturing hoisting machines and elevators.

The Lookout Water Co., Chattanooga, Tenn., contemplate laying 12,000 feet of 6-inch pipe.

O. F. Brand contemplates starting a sorghum factory at McMinnville, Tenn.

The Poplar Creek Coal Co., of Poplar Creek, Tenn., contemplate doubling their capacity.

The Excelsior Coal & Coke Co., of Chattanooga, Tenn., has been organized by the election of Samuel Blair, president, and D. J. Duffy, secretary. It is proposed to begin mining as soon as possible.

TEXAS.

Blanco, Texas, will build a $25,000 court house.

A $35,000 court house and some iron bridges to cost $15,000, will be erected in Jacksboro, Texas, by order of the County Commissioners of that place.

John Bales, San Marcos, Texas, has established a lime burning business.

Menard county, Texas, will build a $15,000 court house.

H. S. Detwiler, Eagle Pass, Texas, is opening a coal mine.

Honey Grove, Texas, is figuring on water works.

Rumor in Longview, Texas, is to the effect that a large machine and car shop will be erected there.

Sherman, Texas, is discussing issuing bonds to pay for building water works, which are needed. Mayor of Sherman can give particulars.

The Eagle Pass Coal Mines, Eagle Pass., Texas, will increase their capacity from 20 to 100 tons a day.

Ricker & Lee, of Galveston, Texas, have received the contract for building 26 miles of railroad for the Gulf, Colorada and Santa Fe Co.

It is reported that an ice factory will be built at Cisco, Texas, next summer.

A lumber company is being organized in Arlington, Texas, with W. J. Bunson temporarary chairman and Willis M. Timmerman secretary.

It is reported that the Gulf, Colorado & Santa Fe Railroad will extend their road 150 miles, to Brownwood, Texas.

VIRGINIA.

E. Y. Cannon, Richmond, Va., has contracted to have an $8,000 warehouse built.

The Kinney Tobacco Co., of New York, will probably erect a cigarette factory in Richmond, Va.

The ice factory, previously reported as probable in Danville, Va., is being erected by Linde, Smith & Co., of New York.

The Gem Furnace, Shenandoah Iron Co. proprietors, Milnes, Va., has stopped for six weeks for repairs to machinery.

It is reported that a $250,000 company has been organized to develop a silver mine in Rockbridge County, Va.

The Eagle Mining Co., Leesburg, Va. have put up machinery for grinding ore for manufacturing paint, &c.; will erect a drying house.

E. C. Fink & M. McCullough, Fincastle, Va., expect to purchase machinery for manufacturing oil stone razor hones.

Novell, Gates & Snead, Fork Union, Va., have commenced building a large tobacco factory.

Wm. J. Davis, Wytheville, Va., will purchase brick machinery.

Thos. J. Rowland & Co., Lynchburg, Va., have started a broom factory.

A company has been organized to build a $30,000 ice factory at Lynchburg, Va.; property for this purpose has been leased from the Lynchburg Iron Works Co.

The Crozer Furnace, owned by the Crozer Iron and Steel Co., Roanoke, Va., will blow out for repairs.

The Richmond and Alleghany Railroad, office Richmond, Va., have commenced laying track on a branch road to the slate mines in Buckingham county, Va.

A cotton factory is talked of in Scottsville, Va.,—Jacob L. Moon, of Scottsville, and L. B. Johnson, of Antioch, Va., being the chief movers in the enterprise.

WEST VIRGINIA.

The Charleston Water Works Co., Charleston, W. Va., previously reported, expect to commence on their works in April. J. H. Brown is president.

The Kanawha House, Charleston, W. Va., will be rebuilt by present owners; will be 3 stories, and 110 feet deep.

LOCKWOOD, GREENE & CO.
MILL ENGINEERS
Office, 65 Westminster St., Providence, R. I.
Carefully prepared plans, specifications and estimates furnished for the construction, equipment and organization of new mills and the revision and improvement of old.

The report that car works will be built at Harper's Ferry, W. Va., by Thos. H. Savery, of Wilmington, Del., who lately purchased the Government property, is sa'd by Mr. Savery to be erroneous. He will probably build a wood pulp mill for paper works.

The property of the Oakdale Coal and Lumber Co. at Cabin Creek, W. Va., has been purchased by M. Ems, of Shamokin, Pa.

Ths Little Kanawha Transportation Co., capital $50,000, has been organized at Parkersburg, W. Va., by O. B. Smith, Joseph Geim, A. C. Dunbarger, and others, to build and operate steamboats.

BURNED.

Williams & Co's planing mill, Memphis, Tenn. Loss $18,000. Will probably rebuild.

Torbett's Flour Mill, Blountville, Tenn.

Saw mill of Green, Lane & Co., Freeport, Fla. Loss $10,000.

Flour mill of M. F. Wiley, Staunton, Va.; loss $15,000.

Strickland Flour Mills, Buford Ga.; loss $5,000.

New saw mill of Levi Leonard, Lost Creek, W. Va.

Tobacco Factory and Paper Mill.

SALEM, N. C., Feb. 28, 1885.

Editor Manufacturers' Record:

The Machovia Paper Mill, of Salem, N. C., made their first paper last week. This mill has a capacity of one ton of paper per day. This is a new enterprise in our midst, and Griffith & Jouffroy are the proprietors. Messrs. Payne, Lunn & Morris have contracted for a large brick tobacco factory in Winston, N. C. The building is to be finished by June 1, 1885, and will be 50x100 feet, 4-stories high. Respectfully,

FOGLE BROS.

New Saw Mill.

NEWPORT, TENN., Feb. 24, 1885.

Editor Manufacturers' Record:

Our new mill, situated here, is now almost ready for occupancy. Its capacity will be 30,000 feet per day, and we propose to cut up whitewood, white pine, chestnut, &c. Our shipments will be principally to the Scotch market. We have about 100 men in our woods in North Carolina, and if we get logs enough down this season, will add a band saw to our plant. Yours truly,

ALEX. A. ARTHUR, General Manager,
THE SCOTTISH CAROLINA
TIMBER & LAND CO., (Limited.)

Rebuilding Spoke Factory.

HIGH POINT, N. C., Feb. 25, 1885.

Editor Manufacturers' Record:

We were burnt out on the night of the 9th, and, notwithstanding the bad weather, will have our mill nearly complete and a part of our machinery running by March 1st. Will put in a new planer and some other new machinery.

The tobacco business is on a boom here, a new warehouse been built and soon another one to go up. Yours truly,

SNOW & COX.

Building an Ice Factory.

DANVILLE, VA., Feb. 25, 1885.

Editor Manufacturers' Record:

Messrs. Linde, Smith & Co., New York, are building an ice factory at this place.

Yours truly,
W. H. HILL, JR.

MURFREESBORO, TENN., Feb. 21, 1885.

Editor Manufacturers' Record:

We have just started our foundry and put in operation all new tools, of latest design and improvements. Yours respectfully,

MURFREESBORO MACHINE WORKS.

Big Fertilizer Factory.

DURHAM, N. C., Feb. 27, 1885.

Editor Manufacturers' Record:

The Durham Fertilizer Company was organized in 1883; built one factory 3 stories high; later in the year they built a second two stories. In the fall of 1884 they nearly doubled their capacity. Since January 1, 1885, they have purchased a new lot of several acres and have the brick foundation laid for a new factory of 150 in length, with all the lumber on the ground to complete it. Your recent notices have brought many inquiries as to our town. Our future is very bright. EUGENE MOOREHEAD.

An Ice Factory.

ABERDEEN, MISS., Feb. 25, 1885.

Editor Manufacturers' Record:

An ice factory is now being erected by Mr. Samuel Kaye. A large new stave, shingle and heading mill has been erected by Messrs. Tillson & Co. We want a cotton mill.

Yours, &c., J. W. LEE.

DURHAM, N. C., Feb. 27, 1885.

Editor Manufacturers' Record:

Mr. Stone, of Boston, Mass., left here yesterday well pleased with the outlook, after a thorough prospecting investigation for investments. Mr. Reed, of Lynn Mass., is today "doing" the town looking to establishing a shoe factory. Mr. Stone is looking into the real estate chances and will operate for immigration.

WILMINGTON, DEL., March 2, 1885.

Editor Manufacturers' Record:

Our plans for the development of the property at Harper's Ferry have not yet been matured. We will not build car works, but will erect a mill for grinding wood pulp, if we can make satisfactory arrangements with the B. & O. regarding transportation. We believe no better location could be found for a large paper mill than Harper's Ferry. It would have there all the elements of success largely developed.

Yours truly, THOS. H. SAVERY.

Enlarging Gas Works.

MACON, GA., Feb. 16, 1885.

Editor Manufacturers' Record:

I propose only putting in a lathe, drill press, and pipe machine in the shop of the gas works, and building a gas holder and another bench of retorts during the Summer. Nothing of consequence. Respectfully,

A. E. BOARDMAN, Supt.

A New Tin Mine.

BUCKHANNON, W. VA., Feb. 28, 1885.

Editor Manufacturers' Record:

I have a tin mine in partnership with Mr. R. E. Hudkins of this place. We are joint owners in the mine, which is situated in Calhoun county of this State; is on the Little Kanawha river, which is navigable eight months in twelve, and from which we have outlet to Parkersburg, W. Va., Cincinnati, O., Pittsburgh, Pa., and St. Louis, Mo. We also have railroad facilities near, through which we have communication all over the United States.

As to the extent of the mine, it is from 150 feet to 250 feet wide, from 12 feet to 14 feet thick, and, we think, extends back through the hill from 1 mile to 1½ miles. We had some of the ore from the outcrop analyzed by Prof. P. B. Wilson, of Baltimore, and he reports the yield as 12 pounds to the ton of rock, which you will see is very rich in the outcrop, and promises to be richer in the main vein. Owing to the inclemency of the weather, we have been unable to do much toward development of the mine.

We have been sinking a shaft about 50 feet back from the mouth of the mine, when the weather was agreeable. We found a layer of rock over the tin stone, which layer was about 2½ feet thick, and contained some native gold. The mine dips about 1 foot in 12. Yours truly,

THOMAS GRANDISON FARNSWORTH.

Literary Notes.

CASSELL'S DICTIONARY OF ENGLISH HISTORY.—That high authority, the London *Athenæum*, has the following words of praise for this work:

"This book will really be a great boon to every one who makes a study of English history. Many such students must have desired before now to be able to refer to an alphabetical list of subjects, even with the briefest possible explanations. But in this admirable dictionary the want is more than supplied. For not only is the list of subjects in itself wonderfully complete, but the account given of each subject, though condensed, is wonderfully complete also. The book is printed in double columns royal octavo, and consists of 1,119 pages, including a very useful index to subjects on which separate articles are not given. As some indication of the scale of treatment we may mention that the article on Lord Beaconsfield occupies nearly a whole page, that on Bothwell (Mary's Bothwell) exactly a column, the old kingdom of Deira something more than a column, Henry VIII. three pages, Ireland seven and a half pages, and the Norman Conquest three pages exactly. Under the head of "King," which occupies in all rather more than seven pages, are included, in small print, tables of the regnal years of all the English sovereigns from the Conquest. There is also a very important article, "Authorities on English History," by Mr. Bass Bullinger, which covers six and a quarter pages, and which will be an extremely useful guide to any one beginning an historical investigation. * * * * *

It is really difficult to find evidence of incompleteness anywhere. * * * But on the whole there is very little to criticise either in the way of ommissions or positive misstatement, and we cordially commend the volume to the use of those for whom it is designed.

IT is doubtful if those in need of machine tools will ever be able to suit themselves both in quality and price better than just at the present time. While there is a good deal of business doing in this branch of machine manufacture, still it is dull in comparison to what could be done with the facilities at hand. Manufacturers fully appreciate the disadvantages of keeping a plant where 1,000 men might be employed running with 500, and, in order to induce sales and keep more men at work, have made prices remarkably low—lower there is every reason to believe, than they will be a few months hence. In the time of good prices manfacturers, almost without exception, improved the quality of their products, and there never was a time when tools so good in quality and so low in price were in the market. Many machine shops that are getting along with dilapidated makeshifts should consider the advisability of relegating some of them to the scrap heap, and supplying their places while they can do so on such favorable terms.—American Machinist.

MR. JOHN R. RYAN, who recently accepted the position of general manager of the Virginia & Alabama Mining & Manufacturing Co., reports a flourishing business at the company's coal mines in Walker Co., Ala. The mines have been in operation about 8 months. Several hundred tons of coal are being shipped to New Orleans every day, and the capacity will reach to 1,000 tons a day in a few months. The capital backing the enterprise is furnished entirely in Richmond, Va., the principal stockholders being T. C. Leake, Jr., James B. Pace, T. W. Pemberton, J. R. Ryan and Thomas Sedden. The company's P. O. address is Columbus, Miss.

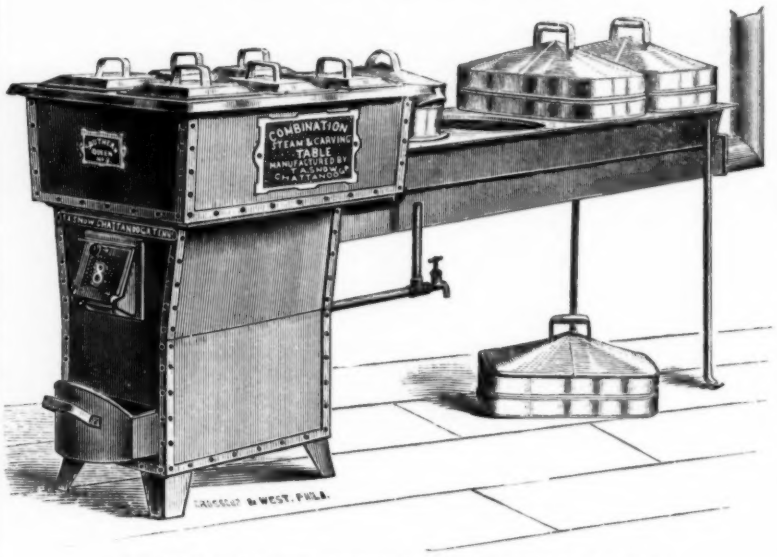
THE BALTIMORE MANUFACTURERS' RECORD is the leading journal of its class in this country. It is doing an excellent work through its close attention to all indications of industrial progress in the South, which, it firmly believes, is to become the greatest manufacturing section of America. Recently it has secured a number of correspondents in Kentucky, who report a number of good items from this State.—Louisville, Ky., Daily Commercial.

The Southern Queen Wrought Iron Range.

The accompanying illustrations represent two lines of goods manufactured on a large scale by Mr. T. A. Snow, of Chattanooga, Tenn. One is the "Southern Queen" wrought iron range, which is made of the best No. 14 charcoal sheet iron, with heavy top plates and linings, dumping grate, sheet-iron ash pan and shelf and hot water box for connecting with tank. The manufacturer guarantees every range "to give perfect satisfaction and to last three times as long as any cast iron stove." He is now prepared to furnish ranges and complete outfits for families, restaurants, boarding houses, hotels of any size, steamboats, &c. Mr. Snow is now manufacturing a full line of these ranges in twelve or fifteen different styles and sizes, and, of course, these are fitted up in a great many ways to suit the purchaser, with or without warming ovens, wood or galvanized iron tanks, charcoal broilers, steam table attachments, &c. The superiority of a wrought iron range over a cast iron stove or range is very great, due to the fact that wrought iron, and especially the superior quality that is used in the construction of these ranges, will not crack or break. The joints are all rivetted together and cannot come apart.

The Southern Queen combined steam and carving table, also illustrated on this page, is another production of Mr. Snow's extensive works. It is designed for restaurants, hotels, railway eating houses, &c., and by its use, vegetables and meats can be kept warm by steam, which prevents their getting hard or dry. The sheet iron used in the construction of these tables is very heavy and of the best quality. The carving dishes are hammered out of heavy sheet copper and well coated with tin, the castings are all heavy and made from the manufacturer's own patterns and thus any piece can be duplicated without trouble. The water in the square tanks under the steam or carving table, is heated from the water heater in the fire box, connected by pipes as shown in the cut.

THE SOUTHERN QUEEN WROUGHT IRON RANGE.



THE SOUTHERN QUEEN COMBINED STEAM AND CARVING TABLE.

The rapid increase in Mr. Snow's business has necessitated an increase in his manufacturing facilities, and so he has lately purchased a new building and is putting in the latest improved machinery for manufacturing his wrought iron ranges, carving tables, hotel boilers, bake ovens, steam tables, laundry stoves, &c. The demand for these goods is from all parts of the country, and as they have been thoroughly tested for a year or more, Mr. Snow proposes now to push his trade and will establish agencies all through the South. In addition to this business, Mr. Snow is also largely engaged in the manufacture of galvanized iron cornice work and a general line of tinware. Further information can be obtained from T. A. Snow, Chattanooga, Tenn.

Wanted—A Furniture Factory.

FRANKFORT, KY., Feb. 19, 1885.

Editor Manufacturers' Record:

We have in our city a splendid opening for a furniture factory,—having nine saw mills, an abundance of poplar, walnut, ash, oak and pine logs on our river, the Kentucky. This is the best lumber market in the State, and we have here resident buyers of lumber for Eastern manufacturers. There are good shipping facilities, cheap labor and low taxes. There is a building with power and shafting, formerly a cotton mill, that can be bought at a reasonable price. It is situated on the river and in a quiet yet accessible portion of the city, and there can be no doubt that it is an excellent opportunity for any one desiring to engage in manufacturing.

RICHARD FERGUSON.

THE Ruthenburg Automatic Fire Extinguishing and Engineering Co., 64 West Third street, Cincinnatti, Ohio, have just finished flooring the building of the Sechler Carriage Works with iron beams and corrugated arches. Old rails were used for beams sixteen feet span, making an excellent as well as cheap job. They have completed the fire protection of the Kokosing Mills at Mt. Vernon, Ohio. The system is complete with chemical tank, automatic alarm, non-freezing chemicals and automatics. Part of the piping is in the open air, and recently experienced 25° below zero with no ill effects. The Manhattan Mills at Toledo, Ohio, are also being finished with the same complete system. Contracts have been closed with the new Postage Straw Board Works, and with the works of DeBus & Hauser, Cincinnati, for complete equipments of automatics, chemicals, tanks and alarms.

MR. JONATHAN CREAGER, 131 E. Front street, Cincinnati, Ohio, manufacturer of the Automatic Brick Machine, has received the contract to fit out complete the yards of Philip Wymond at Aurora, Ind., and of A. & G. H. Bruns, Cincinnati, with the Grand Automatic Brick Machines, conveyor, pug mill, boiler, engine and other brick-yard equipments. He will also furnish one and possibly two of his brick machines to the Lexington Brick Co., Lexington, Ky.

THE MARKETS.

OFFICE MANUFACTURERS' RECORD,
BALTIMORE, March 3, 1885.

The outlook for business continues to improve, and there are indications that confidence is returning, and that capitalists will soon begin to seek investments for the idle money so long hoarded up. The change of administration will not, we think have any injurious effect upon business, and it is quite possible that it will mark the beginning of renewed activity.

Manufactured iron is dull and depressed, with but little business doing and prices weak. Quotations are nominal, as low figures are given to induce purchases. We quote:

Ref. Bar Iron, 1 to 6x⅜ to 1.....	₩ lb.	1.8@	1.9c
" " 1 to 4½x1⅛ to 1....	"	1.8@	1.9c
" " ¾ to 2, round and square.....	"	1.8@	1.9c
Hoop Iron, 1½ wide and upward...	"	2½@	2¾c
Band Iron, from 1½ to 6 in. wide...	"	2½@	2.6c
Horseshoe Iron.....	"	3.2@	3.3c
Norway Nail Rods.....	"	5 @	5¼c
Black Diamond Cast Steel.....	"	10 @	11 c
Machinery Steel.....	"	4¼@	4¾c
Spring Steel.....	"	3½@	4 c
Common Horse Nails.....	"	10 @	11 c
Railroad Spikes, 5½x9-16.....	"	2.5@	2.6c

There is no change in the condition of the local pig iron market, prices and demand continuing as last reported. We quote:

Baltimore Charcoal Wheel Iron (all Baltimore ore)	$28 00@29 00
Virginia C. B. Charcoal Wheel Iron	28 00@29 00
Anthracite, No. 1	19 00@20 00
" " 2	17 00@18 00
" " 3	15 00@16 00
" Mottled and White	13 00@14 00

HARDWARE

The hardware market remains about the same; the volume of business is fairly good, orders being quite numerous, but prices continue very low, leaving little margin for profit.

Nails are quoted as before at $2.25. The demand, owing to the extreme cold weather, continues limited, but as the worst of winter is probably now over, building operations will soon be commenced and nails will meet with more enquiry.

THE Covert Manufacturing Co., of West Troy, N. Y., have issued a new discount list under date of Feb. 16 as follows:

	Discount per cent.
Loop Harness Snaps	50
"New" Loop Harness Snaps	50
"New" R. E. Harness Snaps	60
Martingale Loop Snaps	50
Round Eye Swivel Snaps	60
Loop Swivel Snaps	60
Snap and Thimble	60
Thimbles	50&10
Round eye Snap	60&10
Open eye Snap	60
Strap Eyes	40
Leather Horse Tie	35
Web Horse Tie	35
Horse Ties, Snap and Thimble, (Jute)	60
" " " " " (Hemp)	50&10
Cattle Ties, Snap and Thimble, (Jute)	60
" " " " " (Hemp)	50&10
Lariat Tether	50&10
Picket Pins	40
Horse Tie, O. K. (Jute)	60
" " " (Hemp)	60
" " " " 1 Snap	50&10
Cattle Tie, O. K. (Jute)	60
" " " (Hemp)	50&10
Web Halter	50&10
Rope Halter, ½ in Jute	50&10
" " " " Hemp	50
" " 7-16" Jute	60
Halter Leads (Hemp)	50
" " (Jute)	60
Hitching Cord	35
Weight Cord	35
Hitching Weight	35
Driving Reins	40
Hammock Ropes	60
Bull Lead	50
Bull Snap	40
Soldering Irons	50
Soldering Coppers	50
Breast Chain, Short Snap	50
Lengthening Snaps	35
Open Eye Breast Chain Snap	35
Breast Chain, Long Snap	50
Breast Chain, New Patent	50
Post Chain	60
Halter Chain	50
Rein Chain	60
Martingale Chain	50
Rod Post Hitcher	50
Chain Cow Tie	35
Back or Cart Chain	35
Heel Chains	50
Long Trace Chains	50

Philadelphia Iron Market.

PHILADELPHIA, Mar. 2, 1885.

About the only foundation for the belief or confidence in a stronger iron trade is the double fact that consumers have nothing on hand, and that the spring demand is at our doors. The winding up of the cold snap and the appearance of pleasant weather argues well for improving trade, in view of the cleaned-up conditions of markets generally. Pig iron of all kinds is under better inquiry to-day than it has been for a long time, and it seems as though people were about ready to buy, not only for what they have orders to fill, but to cover orders that will come along during this month. Prices of crude iron have a wide range, according to amount wanted and the deliveries to be had, but those who are buying small quantities find prices steady and firm, especially if the brand which they must have happens to be well sold up, as is often the case. Still there are several makers chasing after buyers all the time. Some of the special brands are held more firmly now than they have been since the opening of the year. Special number one foundry commands $18.50 to $19, though comparatively little of this is sold. Average quotations are $17.50 to $18. Gray Forge still hangs around $15 and $16. Southern irons are offered at $15 and prices are likely to decline a little when the spring opens and shipping declines in price. Muck bars are $27.50; anthracite blooms $42; Bessemer pig $19 to $20. Fair inquiries are in hand for Bessemer and Spiegeleisen. Merchant iron is still dragging along slowly at $1.50 to $1.60 for common. Refined is firm at $1.80 for small lots. The most patient inquiry fails to reveal any general improvement. Everybody is waiting. Nails are firm at $2.20 and stocks absorbed, and orders in hand for thirty to sixty days ahead. Plate and angle iron is under better inquiry and considerable business has sneaked into the market within a few days. Large blocks of rails can be placed at $26. There is a good deal of inquiry for scrap and prices are firmer, owing to the cold weather which interfered with receipts.

Cincinnati Iron Market Report.

Specially reported by ROGERS, BROWN & Co., Pig Iron Commission.

CINCINNATI, Mar. 2, 1885.

The market has maintained the same features through the week, liberal demand and free sales, but depressed values. Several furnaces are asking higher figures for grades on which they are well sold, but others seem content to let their stock go, while they have any, at the extreme bottom. The markets North and South have been thoroughly stripped of low grades of iron by the heavy demand from pipe works.

Nearly all the furnaces are also heavily oversold on standard forge irons. Two leading Southern coke furnaces and one large Southern charcoal furnace will shortly blow out for thorough repairs. The general tendency of the foundry trade is toward improvement, but there is still abundant complaint of dullness. Indications point to still further improvement when spring fairly opens. We quote for cash, f. o. b. cars here:

HOT-BLAST FOUNDRY.		
Ohio and Southern Strong Coke	No. 1	$16 75@17 25
" " " "	No. 2	15 75@16 25
" " " "	No. 3	14 75@15 25
Ohio Soft Stonecoal,	No. 1	17 00@18 00
" " "	No. 2	16 50@17 00
CHARCOAL IRON.		
Hanging Rock,	No. 1	$20 00@21 00
" "	No. 2	19 00@20 00
Tennessee and Alabama,	No. 1	18 50@19 50
" "	No. 2	17 50@18 50
FORGE.		
Strong Neutral Coke		$14 00@14 50
Mottled " "		13 00@13 50
Cold Short		13 50@14 00
CAR WHEEL AND MALLEABLE.		
Southern Car-Wheel Iron		22 00@24 00
Hanging Rock C. B.		25 00@27 00
" " W. B.		20 00@23 00
Lake Superior Malleable		23 00@24 00

Louisville Iron Market.

Specially reported by W. B. BELKNAP & Co., Nails, Wire, Iron, Hardware, Carriage and Wagon Goods.

LOUISVILLE, KY., March 2, 1885.

Bar iron is holding its own in a quiet way. Demand was seriously checked by the extreme cold, but this dispensation was regarded philisophically by manufacturers and no attempt has been made to force prices down in consequence.

Sheet iron.—We have had occasion several times to note the strength of heavier gauges of sheet, which at no time have seemed inclined to follow bar iron into the depths. Galvanized sheet is in somewhat better request. There is no fear of its going below present figures.

Hoops.—There is a much better business in hoops. Cooperage is more active and fair contracts are being placed.

Steel.—The call for better grade of tool steel is encouraging in comparison with other material.

The display of Kentucky plows at the New Orleans Exposition, Meikle's, Hall's and Avery's, are very gratifying to our State pride and a considerable offset to the State's unfortunate reputation for certain forms of lawlessness.

Nails.—These share the quietness of iron. The movement is light and apt to be so from jobber's stocks till the mills get their old contracts cleaned off.

Wire.—Barb wire is specially active and as we have promise of a clear sky for a few days we look for large sales. Prices have not advanced more than $2 or $3 per ton, but the advance as far as it has gone seems genuine and sustained.

Among the better indications of reviving trade is the increased traffic of the railroads. The net earnings of the L. & N. for first three weeks in April have attracted so much attention that within ten days or so the stock has advanced from 23 to 33.

Passenger traffic is heavier even than freight, divided in two diametrically opposed directions; some to New Orleans who feel that the country is safe, and others, a large number, too, towards Washington, who want to help make it so. In this latter, somewhat notorious unarmed Kentuckians are said to be particularly numerous. We quote:

Bar Iron	1 80 @1 90
No. 27 Sheet	3 10 @3 20
Galvanized Sheet, Best	50 & 5%
Crescent Steel	10 @ 12
Plow steel slabs	2¾
Galvanized Iowa Barb Wire	5 00 @ 5¼
Burden Shoes	4 00 @4 10
Juniata Shoes	3 70 @3 75
Carriage Bolts	75 & 10%
Steel Nails	2 30 @2 35
Iron Nails	2 25 @2 35
Sisal Rope	7¾@8
Manilla Rope	14 @ 15

Screws, 75 & 5@75 & 10 per cent. Axes, 6.50@6.75. X cut saws, wide, 26@38 cents per foot. Narrow X cut saws, 21@23 cents per foot. With concessions to large or wholesale buyers.

Specially reported by GEO. H. HULL & Co., Commission Merchants for the sale of Hot and Cold Blast Pig Iron.

LOUISVILLE, KY., Feb. 27, 1885.

The market continues quiet in tone, with a moderately good demand for present and future delivery; and although there has been no well-defined advance in prices, at the same time, some brands that we sold very low three months ago could not be bought to-day at less than 50 cents to $1 per ton advance on those special prices. We quote:

PIG IRON.	
Southern Coke, No. 1 Foundry	$16 50@17 50
" " " 2 "	15 25@16 50
Hanging Rock Coke, No. 1 Foundry	16 00@17 00
" " Charc'l, " "	21 00@21 50
Southern Charcoal, No. 1 Foundry	18 00@19 00
Silver Gray, different grades	15 00@16 00
Southern Coke, No. 1 Mill, Neutral	13 75@14 50
" " " 2 " "	13 25@13 50
" " " 1 " Cold Short	13 00@13 50
Southern Charcoal, No. 1 Mill	16 00@17 00
White and Mottled, different grades	12 00@13 00
Southern Car Wheel, standard brands	25 00@26 00
" " " other brands	20 00@22 00
Hanging Rock Cold Blast	24 00@25 00
" " Warm "	20 00@21 00

St. Louis Iron Market.

Specially reported by HOPPER & Co., Pig Iron and Iron Ore, No. 318 Olive Street.

ST. LOUIS, Mar. 2, 1885.

There has been some iron moving for the past two or three weeks in considerable quantities at very low prices. The general situation beyond the seasonable business has not been changed. We quote:

HOT-BLAST CHARCOAL.	
Missouri	$15 00@17 00
Southern	19 00@20 00
Ohio	20 00@22 00
COKE AND COAL.	
Missouri	15 00@17 00
Southern	15 00@17 00
Ohio	20 00@22 00
MILL IRONS.	
Red Short	14 50@15 50
Neutral	14 00@15 00
CAR-WHEEL AND MALLEABLE IRON.	
Missouri	18 00@20 00
Southern	23 00@27 00
Ohio	23 00@30 00

Iron, par.

Chattanooga Iron Market.

Specially reported by S. B. LOWE.

CHATTANOOGA, TENN., Mar. 2, 1885.

The wet cold and disagreeable weather of the past few weeks has given place to the bright genial sunshine of spring and the effect upon the spirits of business men is very observable. At no time in the history of our country has there been a more inquiring spirit manifested than at the present time. Large numbers of Northern people enroute to or from the New Orleans Exposition are stopping over and prospecting our district, and the result must eventually be benefical to our section. Trade in pig iron continues good with the Southern foundries, and its volume is somewhat increased. There is a feeling among our furnace owners that prices will gradually go higher as the summer advances, but for the present we make no change in our quotations:

No. 1 Foundry	$15 00 @16 00
No. 2 Foundry	14 50 @15 00
American Scotch	14 50 @15 00
Gray Forge	13 00 @13 50
Car-Wheel Iron	22 00 @24 00
Ores, Red and Brown	1 50 @ 2 25
Furnace Coke	2 00 @ 2 50
Nails, car-load lots, 30 days	— — @ 2 25
Bar Iron, per lb	— — @ 1 75
Old Rails	— — @16 00
Old Wheels	— — @13 50
Wrought Scrap, No. 1	— — @— —
" " No. 2	— — @— —
Cotton Tie Clippings	— — @— —
Cast Scrap	— — @— —
Rail-Road Splices	— — 1 75
Light Rails	2 00 @— —
Barbed wire—four point galvanized	— — @— —
Barb wire—Cambria link	05 @ 05¼

PAINTS, OILS, &c.

PAINTS.	
Black Lamp, coach painters	₩ lb 20c
Black Lamp, ordinary	₩ lb 4@6c
Black Ivory Drop, fair	12@15c
Black Ivory Drop, best	20c
Black Paint, in oil. kegs, 6c; assorted cans, 9c	
Blue Prussian, fair to best	35@40c
Blue Prussian, fair to best, in oil	35@40c
Blue Chinese, dry	70c
Blue Ultramarine	15@25c
Brown, Spanish	1c
Brown, Van Dycke	5@15c
Green, chrome	8@15c
Green, chrome, in oil	9@12@15c
Green, Paris	good, 20c; best, 25c
Green, Paris, in oil	good, 20c; best, 25c
Iron Paint, bright red	₩ lb 2¼c
Iron Paint, brown	₩ lb 1½c
Iron Paint, purple	₩ lb 3c
Iron Paint, ground in oil, bright red	₩ lb 5½c
Iron Paint, ground in oil, red	₩ lb 5c
Iron Paint, ground in oil, brown	₩ lb 4½c
Iron Paint, ground in oil, purple	₩ lb 6c
Linseed Oil, raw	53c
Single Boiled	55c
Double "	61c
Mineral Paints	3@4c
Orange Mineral	10c
Red Lead, American	6¼@7c
Red Venetian, (English) dry	$1.50 to $1.75
Red Venetian, in oil. assorted cans, 9c; kegs, 6c	
Red Indian, dry	8@12c
Rose Pink	10@13c
Sienna, American, raw	4c
Sienna, Burnt	4c
Sienna, burnt, in oil	8@15c
Sienna, raw	8@15c
Umber, burnt	4@8c
Umber, burnt, in oil	8@15c
Umber, raw	3½@7½c
Umber, raw, in oil	8@15c
Vermilion, Chinese	90c
Vermilion, English	60@65c
Vermilion, American, common	15c
White Lead, American, pure dry	6@6½c
White Lead, American, pure in oil	6@6½c
White, Paris, English, prime in brls.	1½@2c
Yellow Ochre, French	$1.75
Yellow Ochre, French, in oil. asst'd cns, 9c; kegs, 6c	
Yellow Ochre, American in bbls.,	1¼@1½c
Yellow Chrome	8@18c
Yellow Chrome, in oil	9@12@18c
Zinc White, American, No. 1, dry	5@6c
Zinc White, American, No 1, in oil	7@9c
Zinc White, French (Parish) dry	9@12c
Zinc White, French in oil	10@14c
OILS.	
Bleached W. Sperm oil	1 01@1 08
Nat. " " "	1 00@1 03
B. W. Elephant oil	75@—
" Whale oil	70@ 72
Prime Lard oil	62@ 65
Extra No. 1 Lard oil	60@—
Lubricating oils	19@ 25
Miners' oil	45@ 55
W. Pressed Fish oil	38@ —
Neatsfoot oil	65@ 80
Steam-refined Cylinder oil	40@ 55
Best Filtered " "	65@—
Signal oil	55@ 65
Paraffine	12@ 20
SUNDRIES.	
Benzine	₩ gal., 8@10c
Turpentine	₩ gal., 33½ c
Chalk	½c
Chalk, block	½c
Dryer patent Am'n asst'd cans, 8c; keg, 7c	
Frostings	40c
Glue, white	18@36c
Glue, sheet	14@20c
Glue, ordinary	9@12
Glaziers' Points, zinc	8c
Gum, Copal	36c
Gum, Damar	25c

LODGE, BARKER & CO.
Cincinnati, Ohio.
Manufacturers of first-class
Square Arbor Fox and Improved Turret Lathes,
Valve Milling Machines, Box Chucks, Turret Chucking and Engine Lathes. Write for Cuts, Photographs and descriptions.

J. S. JOHNSON & CO.
Manufacturers of Twine and Netting.

Importers of Knox's Gilling Thread and all kinds Fishing Tackle, and dealers in Cordage. 61 South Street, Baltimore, Md.

Law Department.

Edited by B. HOWARD HAMAN, Attorney at Law, Baltimore, Md.

It is the province of this Department to reply to enquiries that may be made by our patrons respecting the legal aspects of any matter that may arise in their business. Any questions as to doubtful points of law will be answered without charge in this column. All questions submitted must be accompanied by the name and address of the sender, not however, for publication. Letters should be addressed, Editor Law Department, MANUFACTURERS' RECORD.

BALTIMORE, Feb. 26, 1885.

Editor Law Department,
Manufacturers' Record:

Dear Sir—In company with two ladies some time since, I made a trip to Washington. I purchased at Calverton station three tickets, paying for them two dollars each, (round trip,) the same price that is asked at any other station in the city via the B. & P. R. R. Upon our return that evening we went to the train, and the gateman at the station in Washington demanded our tickets. We showed them to him, and after looking at them, he passed us through and told us which train to take. We got aboard, and after starting, the conductor came through and asked us for our tickets. We showed them to him, and he said the train did not stop at Calverton. We told him any other stop in Baltimore would suit us as well. He replied we would have to pay additional fare from Calverton to Union station. This I refused to do, and we were forcibly ejected from the train. Were the company right in this action?

Reply—No. If you have stated all the facts, the action of the conductor was outrageous.

BALTIMORE, March 2, 1885.

Dear Sir—I sold a farmer in this State fertilizers last fall, and took his notes binding upon his wheat for the payment of my bill. Now, a creditor of his has got a judgment, and intends to levy on his wheat crop in the ground. What I want to know is, whether my claim will hold against the party having the judgment?

Reply—No. In order for a creditor to have a valid lien upon property of which his debtor remains in possession, he must be protected by a bill of sale, sworn to, acknowledged before a justice of the peace, and recorded within twenty days after execution of the same.

PHILADELPHIA, PA., Feb. 28, 1885.

Dear Sir—How far will preferences be upheld under the laws of your State, when they are made in a deed of trust?

Reply—Not at all.

BALTIMORE, Feb. 28, 1885.

Dear Sir—Can I libel a boat which hails from this city for spars I furnish her? I am told I cannot libel a home vessel for supplies of any kind. How is this?

Reply.—It is thus; the Supreme Court of the United States has held, in the great case of the ship Lottowanna, that a libel cannot be filed for supplies in the home port, but the State Law of Maryland has come in and cured this defect in the maritime law by passing the "boat lien laws." After you file your boat lien against the vessel you can proceed to libel her in the U. S. Court. You must be careful, however, to file your lien within six months from the beginning of the work.

READING, PA., March 1st, 1885.

Dear Sir—Will you please inform me if I can, under the Pennsylvania laws, take a good mortgage on personal goods and effects for a future loan?

Reply.—You cannot take a valid mortgage of any personal property in your State, whether for past or future advances, except in one or two clearly defined cases. These are, for buildings and machinery on leased collieries and manufactories. Mortgages on such properties are as good for future as for past indebtedness.

CHICAGO, ILL., February 27, 1885.

Dear Sir.—Will an agreement to sell machinery on the installment plan hold in your State, without the agreement being recorded?

Reply.—Yes.

J. A. BONITZ, publisher of the Goldsboro Messenger, has ordered of Morse, Williams & Co., Philadelphia, one of their improved hand-power elevators with automatic hatch door for his new building now in course of erection.

Sheffield's Bright Prospects.

SHEFFIELD, COLBERT CO., ALA., Feb. 28, 1885.
Post-Office—Tuscumbia, Ala.

Editor Manufacturers' Record:

No negotiations are or have been pending for a consolidation of interests between the Pratt Coal, Coke & Iron Co. and the Sheffield Land, Iron & Coal Co. I enclose a communication from the Birmingham, Ala., correspondent of the Montgomery (Ala.) Advertiser, stating and commenting upon a report current at Birmingham and not denied by "any one connected with the Pratt Co., to the effect that the Pratt Co. "had sold an interest in their rich property for an interest of like value in the Sheffield Land Co."

If the report is true, the transaction was probably between the Pratt Co. and the Alabama Improvement Co., which is engaged in the construction of the Sheffield & Birmingham Railroad and owns the road. The latter company owns a large amount of the stock of the Sheffield Co., and may have disposed of a portion to the Pratt Co. for some of its stock or mineral lands, most probably the latter.

In the latter part of January I was reliably informed that Col. Ensley, the general manager, and one of the largest stockholders in the Pratt Co., stated the intention of himself and Mr. Hill to erect an iron furnace in Sheffield, and that Sheffield had an advantage of $1 to $2 per ton over Birmingham, in the manufacture of iron. Messrs. Hill & Ensley own many thousands of acres of very rich iron and coal lands, tributary to Sheffield, along the line of the Sheffield & Birmingham Railroad. Fully appreciating the advantages of Sheffield, probably Messrs. Hill & Ensley have traded some of their mineral lands for Sheffield stock. If so, the speedy development of Sheffield into the leading iron manufacturing city of the South, already beyond reasonable doubt, will be doubly assured.

Several different parties have signified their intention to establish manufacturing enterprises at Sheffield at an early date, such as saw mills, planing mills, sash, door and blind and general wood-working machinery, lime works, steam brick works. Others are in contemplation and will probably be established, such as hub, spoke and handle works, foundries and machine shops, stone works, &c. Under agreement with our Company, the Ellis Iron Furnace is to be commenced within 60 days after completion of Sheffield & Birmingham R. R. to point 45 miles south of M. & C. R. R., whereby an bundant and cheap supply of ore and coal will be assured. The Alabama Improvement Co. are under obligation to our Company to extend their road at least that far not later than December 18th, 1885.

Quite a number of lot owners have determined to erect substantial buildings, commencing same during the spring, so that there is no doubt of a big building boom before the spring is over.

Very truly yours,
ALFRED H. MOSES.

Cincinnati Iron Market Report.

Specially reported by E. L. HARPER & CO.

CINCINNATI, March 2, 1885.

There is a marked improvement in business, and the general prospects are brighter. Inquiries for prices and mail orders are more numerous, which are safe indicators of a revival of trade. The mills are looking about for raw material and preparing to take the tide at its flood, the general belief having obtained that the reaction has at last fairly set in. The foundries are not more active as yet, but the opening of spring trade, and the near approach of the building season, give promise of an improvement both in demand and prices. We quote as prices current cash on cars here:

FOUNDRY.		Cash.
Hanging Rock Charcoal, No. 1		$20 00@21 00
" " " "	2	19 00@20 00
Strong Neutral Coke, "	1	16 75@17 50
" " " "	2	15 50@16 25
American Scotch, "	1	16 50@17 00
GREY FORGE.		
Neutral Coke		14 00@14 50
Cold Short		14 00@14 50
CAR WHEEL AND MALLEABLE.		
Hanging Rock, strictly cold blast		25 00@25 50
" " " warm "		22 00@22 50
Lake Superior Charcoal, all grades		21 50@22 00
South. Car Wheel, strictly cold blast		22 00@23 00
Amherst and Virginia Warm Blast		21 00@21 50

BRASS.

ROLL AND SHEET BRASS.

Brown & Sharpe's Gauge the Standard.
New List, Jan. 17, 1884.
Dis 25 %

COMMON HIGH BRASS.

Wider than / and including.	2 / 10	10 / 12	12 / 14	14 / 16	16 / 18	18 / 20
To No. 20, inclusive.	.21	.22	.23	.25	.27	.29
Nos. 21, 22, 23 and 24.	.22	.23	.24	.26	.28	.30
Nos. 25 and 26	.22½	.23½	.24½	.27	.29	.31
Nos. 27 and 28	.23	.24	.25	.28	.30	.32

Add 9 cts. ℔ lb. for sheets cut to particular widths and lengths.
Add ½ c. ℔ lb. additional on each number thinner than Nos. 28 to 38 inclusive.
Brass thinner than No. 38 is Platers' Brass. at ..... 55 cts.
Printers' rules ..... 45 cts.
Printers' Sheets and Plates cut to particular sizes and lengths to No. 20, inclusive ..... 30 cts.
Brazing, Spinning and Spring Brass, one cent more than common High Brass.
Low Brass four cts. ℔ lb. more than common High Brass.
Gilding, Oreide and Bronze seven cts. ℔ lb. more than common High Brass.

SLITTING METAL.

Add to list as follows:

Over ½ in to 2 in., inclusive, Nos. 12 to 20, inclusive	½c.
Over ¼ in. to ½ in., inclusive, Nos. 12 to 20, inclusive	1
¼ in. and narrower, not less than	4
Over ½ in to 2 in., inclusive, Nos. 21 to 28 inclusive	1
Over ¼ in to ½ in., inclusive, Nos. 21 to 28, inclusive	2
¼ in. and narrower, Nos. 21 to 28, inclusive, not less than	6
Over ½ in. to 2 in., inclusive, Nos. 29 to 32, inclusive	1½
Over ¼ in to ½ in., inclusive, Nos. 29 to 32, inclusive	3
¼ in. and narrower, Nos. 29 to 32, inclusive, not less than	12
Over ½ in. to 2 in., inclusive, No. 33 and thinner	3
Over ¼ in. to ½ in., inclusive, No. 33 and thinner	6
¼ in. and narrower, No. 33 and thinner, not less than	18
Slit Metal cut to particular lengths, ℔ lb. additional	5

PLATERS' OR GOLD METAL.

In bars	40c
In ingots	43c.
In ingots, planed or polished	46c.

BRASS TUBING.

Brown & Sharpe's Gauge the Standard for all Tubing. Per lb.

Plain, to No. 20, inclusive	
Above 5-16 inch to 3 inches, inclusive	$ 35
Plain, to No. 21, above 3 inches	45
" 5-16 inch to No. 20	45
" ¼ inch	60
" 3-16 inch	1.00
" ½ inch	1.50

Bronze Tubing 3 cents per pound more than Brass.
Nos. 21, 22, 23, two cents advance on list for each number.
Nos. 24, 25, 26, four cents advance on list for each number.
Above No. 26, special rates.
All Mandrel-drawn Tubes, ⅜ inch and above, five cents advance on list prices.
All Mandrel-drawn Tubes under ⅜ inch, twenty-five cents per pound advance on list prices.
Fancy Tubing to No. 20 ..... $0.43
English, Scotch and Extra Pattern Fancy Tubing to No. 20 48
Tubing sawed or cut, 2 to 4 feet long, one cent advance on list.
Add to one cent one-half cent for each additional cutting under two feet.

WIRE IN COILS.

Old English gauge the Standard.

	Common High Brass.	Low Brass.	Gilding, Bronze and Copper.
All Nos. to No. 16, inclusive	$ .22	$ .26	$ .30
Nos. 17 and 18	23	27	31
" 19 and 20	24	28	32
" 21	25	29	33
" 22	26	30	34
" 23	28	32	36
" 24	30	34	38
" 25	32	36	40
" 26	35	39	43
" 27	38	42	46
" 28	42	46	51
" 29	45	49	54
" 30	48	52	62
" 31	51	55	67
" 32	55	59	73
" 33	59	63	82
" 34	64	68	95
" 35	70	74	1.30
" 36	76	80	1.50
" 37	1.00	1.04	1.70
" 38	1.30	1.34	2.00
" 39	2.00	2.00	3.25
" 40	2.60	2.60	5.75

Spring Wire, 2 cts. ℔ lb. advance.
Whitened Wire, 3 cts. ℔ lb. advance.
Flat, Square and Half-round Wire 4 cts. advance on Round Wire.
Fancy Wire not less than 10 cts. advance on Round Wire.
Spooling on one-pound spools 12 cts. ℔ lb. extra.
Spooling on ten-pound spools or more, 2 cts. ℔ lb. extra.

Carriage and Wagon Material.

AXLES.

Half Patent, solid collar	dis 60 %
Common	rate 4
Concord	8½

BODY LOOP ENDS.

Plain, set	100
Bolts, Eagle	75

CLIPS.

Superior Axle	dis 60 %
Norway	" 20 %
Saddle	doz set $1 50

FINISHED CLIP KING BOLTS.

	Nos. 1 & 2	3
Flanged, ℔ doz	$3 00	3 75

DASHES.

Leather, new list	dis 5 %

ENAMELED CLOTHS.

Muslin, ℔ yard, 5-4	18
Drill, " 50 in	24
Duck, " 50 in	29
Tan Back, " 5-4	32

BELLOW PLATES.

Per lb	8

FIFTH WHEELS.

Derby, ⅝, ℔ doz	$7 50
" ¾, "	8 50

RUBBER DUCK AND DRILL—35 % off list.

SPRINGS.

Seat, 1½ x2x26, ℔ pair	90
Buggy, 1½ in. and larger	8
" 1¼ to 1⅜ in	9

Oil-tempered springs 2c. advance from above.

SHAFT COUPLINGS.

Discount	50 %

MALLEABLE CASTINGS.

Rate	8
Core	12

POLE EYES AND COUPLINGS.

Discount	40 %

H. B. LEATHER.

No. 1 Top, ℔ ft	28
" 2 " "	23
" 1 Dash, "	12
" 2 " "	10 @10½
Fancy Morocco, ℔ ft	26
Bow, ℔ ft	20 @23
Collar, "	24
Harness, ℔ lb	40

STEP PADS.

Per doz. pair	$2 25@7 50
Spokes, No. 1, 1 to 1½	$2 25 ℔ set.
" X, 1 to 1½	2 50 "
" XX, 1 to 1½	3 50 "
Wheels, Sarven Patent	$6 50 to 14 00 "

HICKORY FELLOES.

X	1	1⅛	1¼	1⅜	1½
	1 25	1 25	1 35	1 60	2 00 ℔ set.
XX.	3 00	3 25	3 50	3 75	4 25 "

HICKORY SPOKES.

No. 1	1	1⅛	1¼	1⅜	1½
	2 25	2 25	2 25	2 50	2 75 ℔ set.
XX,	3 50	3 50	3 50	3 50	3 75 "

HUBS.

No. 1	5x7	6x8	7x9	8x10
	90	1 00	1 35	1 80 ℔ set.
XX	5 in. and smaller,			5½
	2 25			2 50 ℔ set.

FINISHED SHAFTS AND BARS.

X	XX
4 50	7 00 doz. pairs

IRON WORKING MACHINERY.

NEW.

1 Engine Lathe, each 10, 11, 12, 13, 14, 15, 16, 18, 20, 22, 24, 26, 28, 30, 36, 42 and 48 in. swing; length of bed to suit.
1 Fox Turret Lathe, each 13, 15 and 16 in swing; 5 ft. bed.
1 Sq. Arbor Fox Lathe, 15 in. x 6 ft.
1 each, Hand Lathes, 10, 12, 14, 15 and 18 in. swing.
1 Iron Planer, each to plane 18, 20, 22, 24, 26, 30 and 36 in. wide and high; length of table to suit.
1 each 16, 20, 22, 23, 25, 28, 30, 34, 38 and 42 in. swing. Upright Drills.
1 each, 2, 3, 4 and 6 Spindle Gang Drills.
1 each 8, 10, 12, 15, 20 and 28 in. Shapers.
1 No. 2 Milling Machine. Lincoln Pattern.
1 Grant & Bogert Milling Machine.
1 each, Nos. 2, 4 and 5 Screw Machines.
1 each, 3 and 7 Spindle Nut Tapper.
1 Boring and Turning Mill, each 50 and 72 in. swing
1 Cutter Grinder.
1 12 in. and 24 in. Cylinder Horizontal Engine.
1 each 4, 5 and 6 ft. Arm Universal Radial Drills.
1 Pat. Makers Lathe, 25 in. x 12 ft. between centres.
1 Grant's New Universal Miller.
1 Pr. Bending Rolls for ⅝ in. x 60 in. plates.

SECOND-HAND.

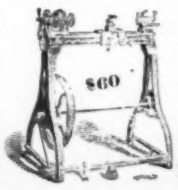
1 Engine Lathe, each 18 in. x 8ft. Good as new.
1 Iron Planer, 24 x 24 x 6 ft.
1 " " 20 x 20 x 4 ft. A1 order.
1 " " 24 x 24 x 5 ft. " "
1 " " 30 x 30 x 7 ft. " "
1 " " 32 x 30 x 9 ft. " "
1 40 lb. Bradley Hammer.
1 Lincoln Pattern No. 2 Miller.
1 36 in. Gear Cutter.
1 Horizontal Boring Machine; takes 6 ft. between centres; 36 in. swing.
All kinds Machinists' Tools and Supplies.

New York Agency of the Tanite Co.
Grant & Bogert Machine Tool Works.
AND FOR THE
"New Polished" Shafting.
H. PRENTISS & CO.
42 Dey Street, New York.

FOR SALE.

A Wheelock Engine, 16x48 inch, rated 125 horse power.

W. J. HOOPER & SON,
No. 6 S. Calvert St., Baltimore, Md.



MACHINISTS
and others should examine the merits of our new improved 14x40 inch Screw Cutting Lathe. Price $175. Descriptive price-list of lathes and tools mailed on application.
SEBASTIAN, MAY & CO.
189 W. Pearl St., Cincinnati, O.

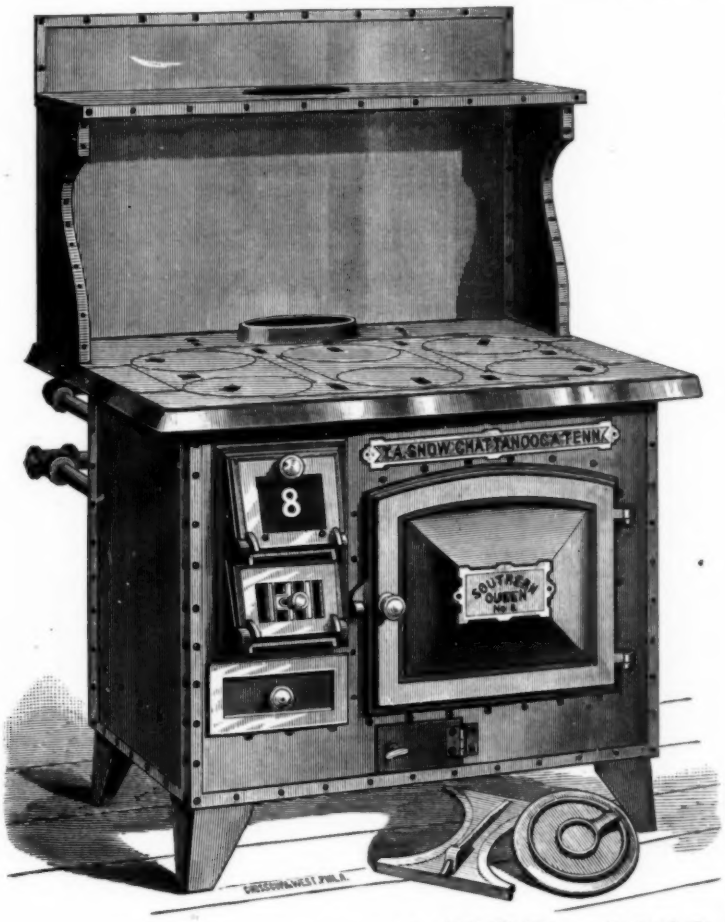
T. A. SNOW'S

CELEBRATED

"SOUTHERN QUEEN"

WROUGHT-IRON

COOKING RANGE



List of Trimmings furnished with Each Range.

1 Elbow,	1 Wash Boiler,	3 Patties,
3 Joints of Pipe,	1 Coffee Boiler,	1 Biscuit Cutter,
2 Iron Pots,	1 Steamer,	1 Scraper,
2 Iron Skillets,	3 Pie Pans,	1 Lid Lifter,
2 Iron Griddles,	1 Dipper,	2 Pot Covers,
1 Iron Gridiron,	1 Tin Cup,	1 Grater,
3 Iron Baking Pans,	1 Spoon,	1 Iron Heater,
1 Iron Tea Kettle,	1 Pepper Box,	1 Milk Pan,
1 Muffin Mould,	1 Flesh Fork,	1 Cake Turner,
1 Vegetable Ladle,	1 Waffle Iron,	1 Copper Bottom Sauce Pan.

FOR WOOD OR COAL.

Manufactured in my own workshop of THE VERY BEST No. 14 Charcoal Sheet iron; heavy top Plates and Linings; Dumping Grate; Sheet-Iron Ash Pan and Shelf; Hot Water Box for connecting with Tank, or if preferred will furnish plain linings. Every one guaranteed to give perfect satisfaction, and to last three times as long as any Cast-Iron Stove. Especially adapted to Families, Restaurants, Boarding Houses, Steamboats, &c. Charcoal Broiler, Warming Oven and Square Galvanized Iron Tank can be attached to this Range.

By attaching water pipes to water box, hot water can be forced all through your house.

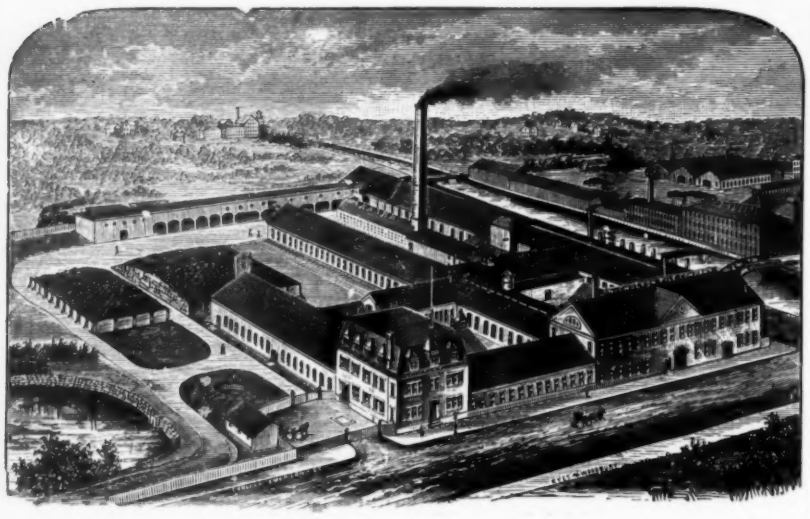
PRICE:

Price of No. 8 single oven Range, vessels complete, top cooking surface 29x37 inches; oven 18x21 inches; weight 400 lbs., - - - - - - - - - - $60.00

Our Double Oven Hotel Cooking Range is unsurpassed; top cooking surface 62x33 in.; size of each oven 18x23 with 8 8-inch cooking holes; weight 652 pounds. Complete, - $115.00

We also keep in stock a great variety of Ranges, Steam Tables, Carving Tables, Wrought-Iron Laundry Stoves, and make almost anything in this line at short notice and very much cheaper than they can be bought in Northern Markets. We have recently gotten out six new Ranges—Small, Medium and Very Large.

T. A. SNOW, Chattanooga, Tenn.

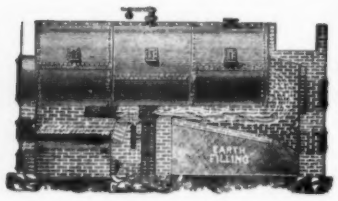


Nicholson File Co.

Works—PROVIDENCE R. I.—1882.

JARVIS PATENT FURNACE

FOR SETTING STEAM BOILERS.



Economy of Fuel, with increased capacity of Steam Power. Like the **Siemens Process of Making Steel,** it utilizes the waste gases with hot air on top of the fire. Will burn all kinds of waste fuel without a blast, including Slack Coal, Sawdust, Logwood Chips, &c. Send for Circulars.

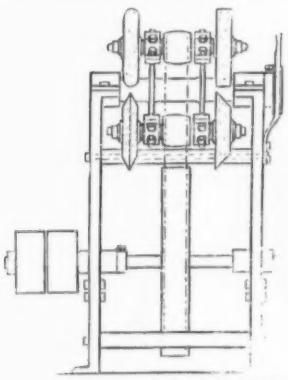
Jarvis Engineering Co.,

A. F. UPTON, Treas. and Gen'l Manager,
7 Oliver St., Boston, Mass.

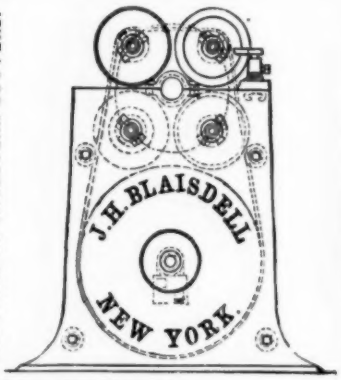
JOSHUA C. COE, Agent for Maryland and Virginia, 18 Second Street, Baltimore, Md.

——SOUTHERN REFERENCES:——

Eagle & Phenix Mfg. Company, Columbus, Ga.
Lane Cotton Mills, New Orleans, La.
Central Rolling Mills, Louisville, Ky.
Anniston Mfg. Co., Anniston Ala.
J. P. King Mfg. Co., Augusta, Ga.
Coosaw Mining Co., Charleston, S. C.
Rose Mining Co., Charleston, S. C.
Maryland Pavement Co., Baltimore, Md.
Brush Electric Light Co., Baltimore, Md.
Ettrick, Matoaca and Battersea Mfg. Co's., Petersburg, Va.
Symington Bros. & Co., Baltimore, Md.
Rasin Fertilizing Co., Baltimore, Md.
Henry McShane & Co., Baltimore, Md.
Tanner & Delaney Engine Co., Richmond, Va.
Sibley Mills, Augusta, Ga.
Graniteville Mfg. Co., Graniteville, S. C.
Charleston Bagging Co., Charleston, S. C.
P. H. Mayo & Bros., Richmond, Va.
Nashville Mfg Co., Nashville, Tenn.
National Mfg. Co., Nashville, Tenn.



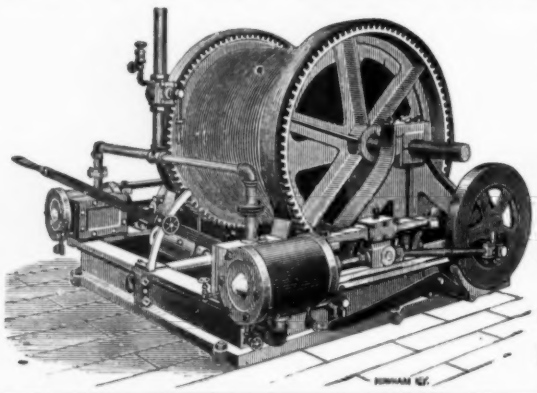
BLAISDELL'S
Eight Wheel Emery Machine,
FOR GRINDING
ALL KINDS OF IRREGULAR CUTTERS.



GOODELL & WATERS,

Manufacturers of all kinds of WOOD-WORKING MACHINERY, Warerooms, 115½ Liberty Street, New York. **J. H. BLAISDELL, Manager.**

IMPROVED HOISTING ENGINES



—WITH—
WIRE-ROPE DRUMS
AND
SAFETY BRAKES.

SPECIALLY ADAPTED TO
Mining ✱ Interests.

MANUFACTURED BY THE
Lidgerwood Mfg. Co.
96 Liberty St., N. Y.
Hoisting Engines for all purposes.

MORTON, REED & CO., Agts.
59 & 61 German St., Baltimore.

STEAM ENGINES and BOILERS

2 to 2,000 Horse-Power, for all kinds of work. Also, **Wood and Iron-Working Machinery.** All Machinery guaranteed.

W. E. CURTISS, 1425 Filbert St. PHILADELPHIA.

HOOPES & TOWNSEND,

MANUFACTURERS,
PHILADELPHIA, PA.

KEYSTONE BOILER RIVETS.

Cold-Punched Square and Hexagon Nuts.

Finished and Case-Hardened Steel Hexagon Nuts.

BRIDGE RODS AND RIVETS.

BUILDERS' IRON WORK.

TANK AND COOPERS' RIVETS.

THE MEDART PATENT

WROUGHT ✱ RIM ✱ PULLEY.

THE LIGHTEST, STRONGEST, BEST BALANCED, AND CHEAPEST IN THE WORLD.

Whole pulleys from 9 inches to 120 inches diameter. Split pulleys from 12 inches to 120 inches diameter.

All widths of face up to 36 inches, crowning or straight, with single, double or triple sets of arms. Also tight and loose pulleys. Absolute Satisfaction Guaranteed. SHAFTING, HANGERS, COUPLINGS, &c.

MEDART PATENT PULLEY CO.,

1206 TO 1214 N. MAIN STREET, ST. LOUIS, MO.

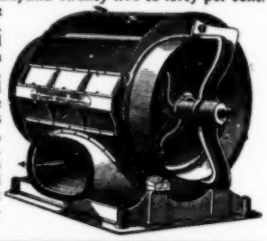
STORES: 99 & 101 W. Second St., Cincinnati. 24 & 26 S. Canal St., Chicago.

THE MACKENZIE PATENT

CUPOLA AND BLOWER

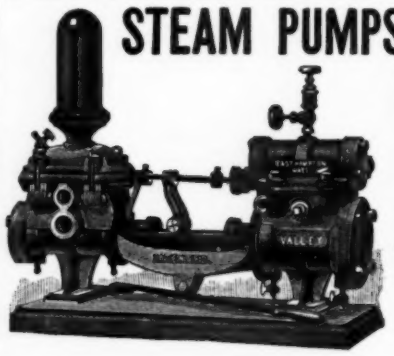
Send for Circular to SMITH & SAYRE MFG. CO., Proprietors, 245 Broadway, N. Y.

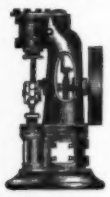
This Cupola has made a great revolution in melting Iron. It differs from all others in having a CONTINUOUS TUYERE, or in other words, the blast enters the fuel at all points. Above one ton capacity per hour, they are made oval in form. This brings the blast to the center of the furnace with the least resistance and smallest possible amount of power, and in combination with the continuous Tuyere causes complete diffusion of the air throughout the furnace, and uniform temperature, melting ten or fifteen tons an hour with the pressure of blast required to melt two or three tons in an ordinary Cupola. It also enables us to save very largely in time and fuel, the experience of our customers showing a gain of twenty-five to fifty per cent. in time, and twenty-five to forty per cent. fuel over the ordinary Cupola, and a BETTER QUALITY OF CASTING, especially in light work. This is due to the thorough diffusion of the air and more perfect combustion, extracting less carbon from the irom, making a softer and tougher casting.



We manufacture these Cupolas of any desired capacity, numbered from 1 to 20, inclusive, the numbers indicating the melting capacities in TONS PER HOUR—No. 1, one ton; No. 2, two tons; No. 3, three tons per hour, and so on up to 15, or 20 tons. We have improved the construction of these Cupolas in every way, have increased their strength and durability, and sought to make them as convenient for working and repairs as our own and the experience of our customers could suggest.

STEAM PUMPS FOR EVERY DUTY.



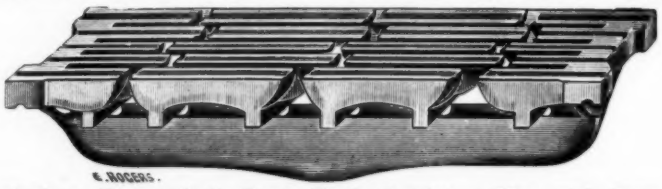


Best Boiler Feed PUMPS in the World.

Acme. Bucket Plunger.

VALLEY MACHINE CO.,
Easthampton, Mass.

WREN'S ✱ PATENT ✱ GRATE ✱ BAR.



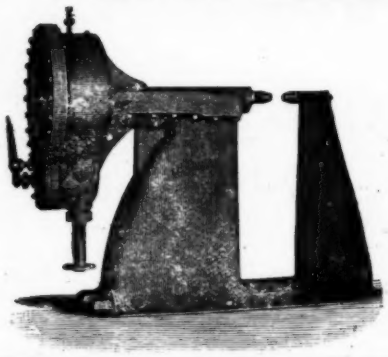
Is Enduring, Economical, Saves Fuel, Carries a Live and Even Fire.
Send for Circular and list of users.

DAVID S. CRESWELL,
816 *RACE STREET, PHILADELPHIA, PA.*

WM. B. BEMENT & SON,

PHILADELPHIA,

Manufacturers of

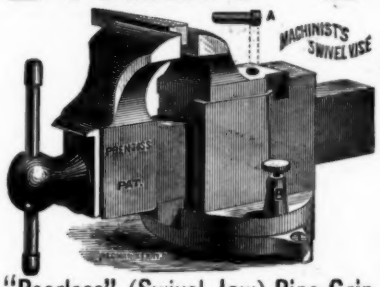


Metal Working Machine

TOOLS

of all descriptions, and of a great number of sizes, including Lathes, Planers Drills, Shapers, Slotters, Milling and Boring Machines, Steam Hammers, Steam and Hydraulic Riveters, Cranes, Punches, Shears, Bending Rolls, Plate Planers, &c.

Prentiss' Patent Vises.



Adjustable Jaw.

Stationary or Pat. Swivel Bottoms

CANNOT GET OUT OF ORDER.

Cheapest and Best Vises for Railroad Shops, Machinists, Manufacturers, Mechanics, &c.

"Peerless" (Swivel Jaw) Pipe Grip.

Every Part Interchangeable.

CAN BE USED ON ANY VISE.

For Sale by the Trade.

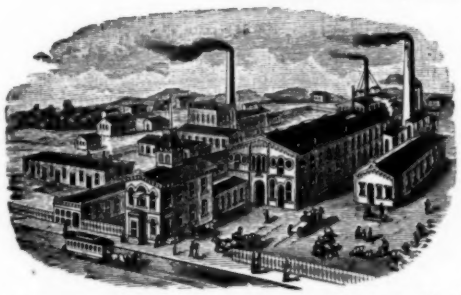
PRENTISS VISE CO., 23 Dey Street, NEW YORK, Sole Proprietors.

Ludlow Valve Manfg. Co.

Office and Works:

938 to 954 River Street, and 67 to 83 Vail Avenue,

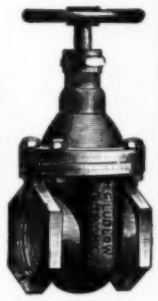
—TROY, N. Y.—



VALVES

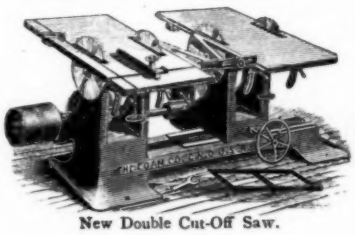
Double and Single Gate, ¼ inch to 48 inch,—outside and inside Screws,—Indicators, etc., for Gas, Water, Steam, Oil.

Send for Circular.



Also Fire Hydrants, Yard and Wash Hydrants, Check and Foot Valves.

Wood-Working Machinery



New Double Cut-Off Saw.

Of the Latest and most Improved Designs for Planing Mills, Furniture and Chair Factories and Agricultural Works, Carriage and Buggy Shops, and

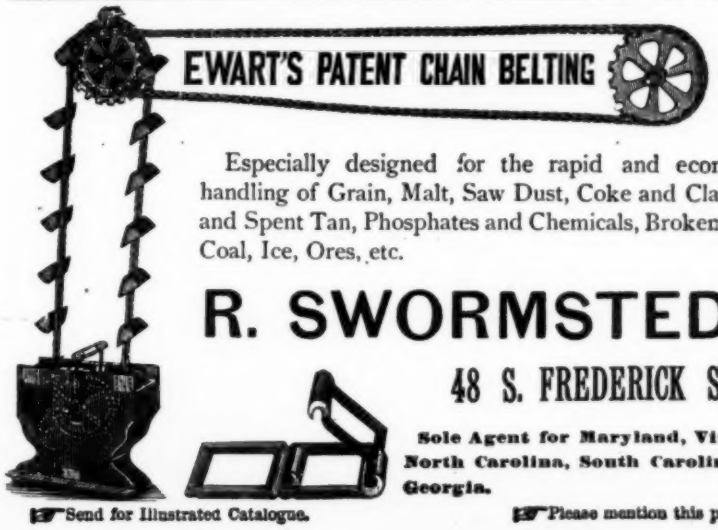
GENERAL WOOD WORKERS.

MANUFACTURED BY

THE EGAN CO.

228 to 248 West Front St., Cincinnati, O., U. S. A.

Thos. P. Egan, Pres. Ed. Ruthven, Sec. F. Danner, Supt.



EWART'S PATENT CHAIN BELTING

Especially designed for the rapid and economical handling of Grain, Malt, Saw Dust, Coke and Clay, Dry and Spent Tan, Phosphates and Chemicals, Broken Stone, Coal, Ice, Ores, etc.

R. SWORMSTEDT,

48 S. FREDERICK ST.

Sole Agent for Maryland, Virginia, North Carolina, South Carolina and Georgia.

☞Send for Illustrated Catalogue. ☞Please mention this paper.

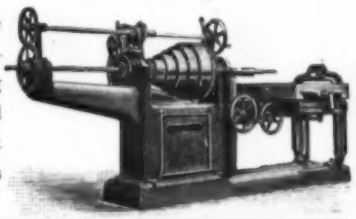
WM. SELLERS & CO.

PHILADELPHIA.

IRON AND STEEL-WORKING MACHINE TOOLS,

For Railways, Machine Shops and Rolling Mills. Also,

Shafting, Pulleys, Hangers, Couplings, &c.



Were the first parties to design and introduce the BALL and SOCKET HANGERS, ADJUSTABLE COUPLINGS, and the system of selling Shafts, Pulleys and Couplings by the piece. Will be pleased at any time to give estimates for work in place, in mills or at our works. ☞Price-Lists and other information given when requested.

BACON Winding Engines, Furnace Hoists, Mine Hoists.

(With or without Boilers.)

"Mining Plants," Concentrating Works, and Dredging Machinery Furnished Complete.

COPELAND & BACON,

85 Liberty Street, New York.

References: Croton Magnetic Iron Mines, Brewster's, N. Y. Crown Point Iron Co., Crown Point, N. Y. Belvidere Iron Co., 52 Broadway, N. Y. Sea Island Chemical Co., Beaufort, S. C.

THE NATIONAL CHUCK

WARRANTED

THE BEST CHUCK IN THE MARKET.

MANUFACTURED BY

THE National Mfg. Co.

MANUFACTURERS OF

Combination, Universal and Independent

LATHE CHUCKS.

NEW HAVEN, CONN.

THE MIDVALE STEEL CO.

TIRES and AXLES

OF EVERY DESCRIPTION.

HOOP AND MACHINERY STEEL

SPRING AND GUN STEEL.

CRUCIBLE AND OPEN HEARTH STEEL.

Works & Main Office: Nicetown, Philadelphia, Pa.

BRANCH OFFICE: 333 Walnut St., Philadelphia, Pa.

The Babcock & Wilcox Water Tube Boilers.

BRANCH OFFICES:

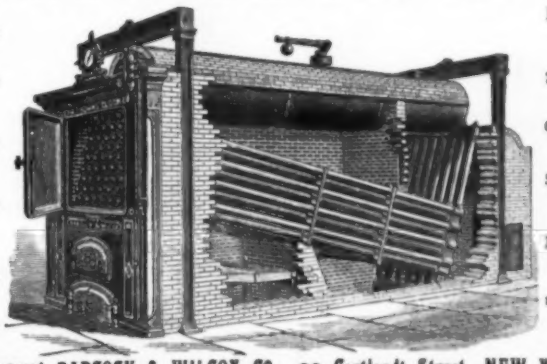
50 Oliver Street, Boston.

32 N. 5th St., Philadelphia.

96 Fourth Ave., Pittsburg.

54 Carondelet St., N. Orleans.

64 W. Third St., Cincinnati.



BRANCH OFFICES:

707 Market St., St. Louis.

64 S. Canal St., Chicago.

561 Mission St., San Francisco.

San Ignacio, No. 52, Havana, Cuba.

107 Hope Street, Glasgow, Scotland.

Manufactured by the BABCOCK & WILCOX CO., 30 Cortlandt Street, NEW YORK.

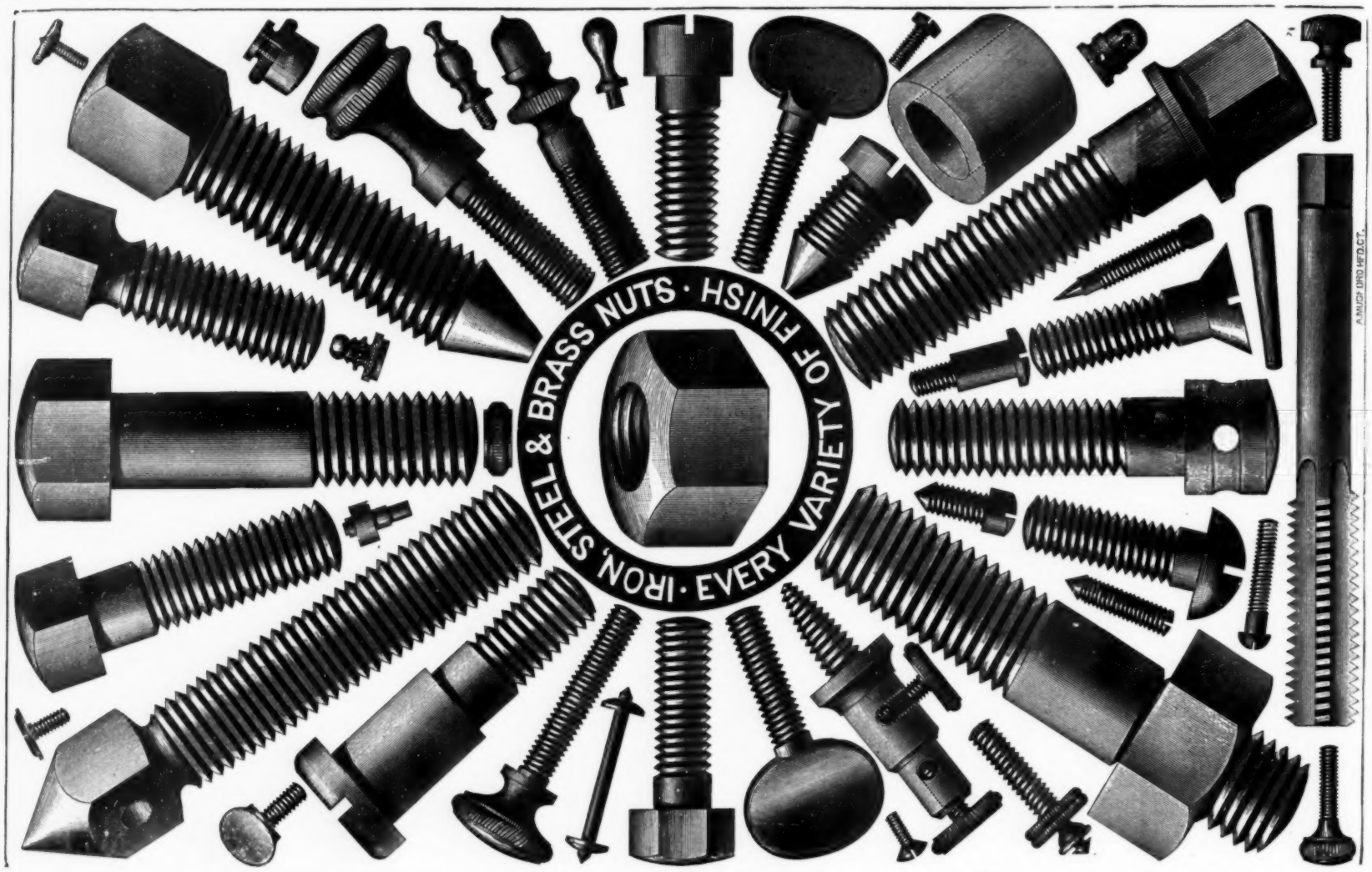
SAML. G. B. COOK & CO., HARDWARE

MANUFACTURERS' AGENTS

63, 65, 67 and 69 German St., BALTIMORE, MD.

AGENTS FOR

T. V. Allis Mnfg. Co.—Buckthorn Wire.
American Screw Co.—Screws, Rivets, Bolts, etc.
Branford Lock Works.
Boss Molasses Gates.
Carr & Crawley.—Shelf and Carriage Hardware.
Lancaster Bolt Co.—Eagle Carriage Bolts.
Lawson & Brenizer.—Hay and Manure Forks.
Meriden Britannia Co.—Rogers Bros.' A1 Plated Goods.
Northwestern Horse Nail Co.
Nicholson File Co.
Naugatuck Cutlery Co.
Globe Horse Nail Co.
Clark Hardware Co.—Spring Butts, Screen Frames, etc.
Cowles Hardware Co.—Geers, Butts, Screw Drivers, etc.
H. Chapin's Sons.—Rules, Levels, Gauges, etc.
Clark Bros. & Co.—Bolts.
Essex Horse Nails.
A. Field & Sons.—Tacks, Finishing Nails, etc.
Hubbard, Bakewell & Co.—Lippincott Axes, Saws, Shovels and Hoes.
Holroyd & Co.—Stocks and Dies.
Henry W. Kipp.—Hammers.
Klein, Logan & Co.—Picks, Mattocks, Sledges, etc.
Kimball's Patent Shovels and Spades.
Lockwood Steel Hoes.
Peck Bros. & Co.—Brass Cocks.
Payson Mnfg. Co.—Building Hardware.
Patton Mnfg. Co.—Enameled and Tin'd Hollow Ware.
Roy & Co.—Strap and T Hinges and Wrought Butts.
Saranac Horse Nail Co.
Scott Mnfg. Co.—Peach and Apple Pearers, etc.
George M. Scott.—Blacksmith Bellows.
Wilson's Mnfg. Co.—Coffee Mills, Vises and Ship Hardware.
Walker's Horse and Mule Shoes.
International and Pimlico Brand of Horse Nails, Foreign and Domestic Hardware, Cutlery, Chains, Pistols, etc.



The Hartford Machine Screw Company, Hartford, Conn.

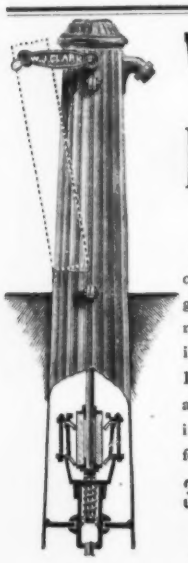
—MANUFACTURERS OF—

Hexagon, Square, Round or Fillister Head Cap Screws, Oval Point and Cupped Point Set Screws, Collar Screws, Hanger Screws, Stud Bolts, Studs and Rolls.

Sewing Machine Screws, Gun Screws, Clock Screws and Trimmings, Piano Screws and Trimmings, Shear, Thumb and Watch Screws, Metal Dowel Pins for Pattern Work, Taper and Straight Pins of all Sizes. Taps and Reamers to match. Telegraph, Electrical and Optical Work. All kinds of Fancy Turned Metal Work. Many o the above varieties we carry in stock.

Small Screw Tools a Specialty. **Cheap Rotary Pumps for Supplying Machine Tools with Oil, Soda Water, &c.**

☞ The attention of Model Makers, Machine Builders and Buyers of Machine Screws is called to the fact that we carry in stock a great variety of Milled Machine Screws, including all Standard Sizes, with Taps to match. **By Referring to our Stock, much Time and Expense may be saved. PRICES Reasonable. Send for Lists.**



W. J. CLARK & BRO.

Manufacturers o

Hydrants.

These Hydrants are made of the best material, and are guaranteed to be entirely non-wasting and non-freezing. The works of these Hydrants can be taken out and repaired without breaking the ground. ☞ Send for circular.

38 N. Holliday Street,
BALTIMORE, MD.

Bates' Hand Elevators.

Patented April 18, 1871. Reissued July 25, 1876.

OVER 6,000 IN USE.

Adapted for Warehouses, Stores, Factories, Hotels. Public Institutions, and every place where merchandise, &c., is transferred from one story to another.

JAMES BATES, Patentee,
Nos. 1, 3 & 5 President Street, BALTIMORE.

1837. NOVELTY WORKS. 1863.

JAMES MURRAY & SON,

Machinists and Millwrights

Engines and Boilers, Mills of all kinds, Marine Railways, &c. Improved Clay Tempering Machinery, Steam or Horse Power. Phosphate Machinery, Crushers, Rollers, Mixers, &c., &c.

40, 42 & 44 York Street,
NEAR LIGHT, BALTIMORE.
☞ Repairing of all kinds promptly done.

REUBEN HAINES,

Analytical ❋ Chemist,

738 SANSOM ST., PHILADELPHIA.
Water Analysis and Assays of Ores and Minerals.

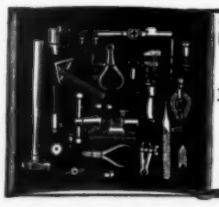
J. W. LOANE,

13 N. Gay Street, BALTIMORE.
Manufactures and sells at lowest rates

TENTS, AWNINGS, FLAGS

Canvas Horse Covers, Plain and Oiled, Yellow and Black.

GIVE HIM A CALL. *ORDERS OR ENQUIRIES BY MAIL RECEIVE PROMPT ATTENTION.*



Send for Catalogue.
Chandler & Farquhar,
168 Devonshire St.
BOSTON, - MASS.
Tools & Supplies
for all classes
OF MECHANICS AND MANUFACTURERS.

HARDWARE.

Baltimore WHOLESALE Prices.

ANVILS.

Eagle and Vulcan ..... ℔ lb. 10 c. dis 20%
Wright's 10¼c
Armitage's Mouse Hole 9½c
Trenton 10¾c
Wilkinson's 10½c

AUGERS AND BITS.

Conn. Valley Mfg. Co. } dis 60% from list of Jan. 7, 1880
Douglass Mfg. Co.
Ives
Cook's Douglass Mfg. Co. ..... dis 40&10%
Griswold ..... dis 50&10%
Patent Solid Head ..... dis 25%
Russell Jennings' Auger, Dowell, Machine-Dowel and Hand Rail Bits ..... dis 10&10&10%
Ives' "Jennings" Bits ..... dis 40&10&10%
Expansive Bits, Clark's small, $18; large, 26 .. dis 25%
Expansive Bits, Ives' ..... $20@30, dis 33⅓%
Expansive Bits Blake's ..... $20, dis 40%
Hollow Augers, Ives' ..... dis 25%
Hollow Augers, Douglass' ..... dis 25%
Hol. Aug., Bonney's Adjust., ℔ doz $48, dis 25&10%
Hol. Aug., Stearns' Adjust., ℔ doz $48, dis 20&10%
Hol. Aug., Ives' Expansive, each $4.50, dis 30&10%
Hol. Aug., Universal Expansive, each $4.50, dis 20%
Wood's ..... dis 25%
Gimlet Bits ..... $7.50 ℔ gross, dis 50%
Gimlet Bits, Diamond ..... ℔ doz $1.25, dis 40%
Double Cut Gimlet Bits, Shephardson's ..... dis 40%
Double Cut Gimlet Bits, Douglass' ..... dis 33⅓%
Double Cut Gimlet Bits, Ives' ..... dis 50%
Morse's Bit Stock Drill ..... dis 25%
L'Hommedieu's Ship Augers ..... dis 15%

AWL HAFTS.

Sewing Brass Ferrule ..... $3.50 ℔ gross—dis 40&10%
Patent Sewing, Short ..... $10 ℔ gross—dis 40&10%
Patent Sewing, Long ..... $1.20 ℔ doz. net
Patent Peg, Plain Top ..... $10 ℔ gross—dis 40&10%
Patent Peg, Leather Top ..... $12 ℔ gross—dis 40&10%

AWLS, BRAD SETS, &c.

Awls, Sewing, Common ..... 75c. to $1
Awls, Shouldered Peg ..... 75c to $1
Awls, Patent Peg ..... 50c to $1.50
Awls, Shouldered Brad, ℔ gross $2.70—dis 25&10%
Awls, Handled Brad ..... $7 ℔ gross—dis 25&10%
Brad Sets, Aiken's ..... ℔ doz. $12—dis 45&10%
Brad Sets, No. 42, $10.50; No. 43, $12.50 ..... dis 70%
Brad Sets, Stanley's Exc.' No. 1, $9.60. dis 30&10%
Brad Sets, Stanley's Exc.' No. 2, $4,80. dis 30&10%
Brad Sets, Stanley's Exc.' No. 3, $7.80. dis 30&10%

AXES.

Collins & Co. ..... $7.25; beveled .. $7.75
Cohoes Mfg. Co. ..... $7.25; beveled .. $7.75

Lippincott or Mann's.

Single Bit, 4½ to 5½ and under .. ℔ doz. $7.25 net
Single Bit, 4½ to 6 and over ..... ℔ doz. $7.75 net
Single Bit, beveled ..... 50c. doz. advance
Double Bit, 4½ to 5½ and under .... ℔ doz. $12.00 net
Double Bit, 4½ to 6 and over ..... ℔ doz. $13.00 net
Double Bit, beveled ..... $1.00 ℔ doz. advance
Second quality Axes ..... 50 cts. less than above

AXLES.

Sheldon & Co., iron ..... 55% off
" " " steel ..... 55% off
AXLE GREASE—Frazer's ..... ℔ lb. 6c.

BALANCES.

Spring Balances ..... dis 40%

BELLS.

Hand, Light Brass ..... dis 75%
Hand, White Metal ..... dis 60%
Hand, Silver Chime ..... dis 20&10%
Hand, Globe (Cone's Patent ..... dis 25&10%
Gong, Abbe's ..... dis 20&10%
Gong, Yankee ..... dis 30&10%
Gong, Barton's ..... dis 30&10%
Leon Reading ..... dis 25&10&10%
Pull, Brook's ..... dis 50&10%
Crank, Taylor's ..... dis 25&10%
Lever, Sargent's ..... dis 55&10%
Bloomfield ..... dis 20%
Lever, R. & E. M. Co's ..... dis 45&10&2%
Call ..... dis 25%
Cow, Common Wrought ..... dis 55&10%
Cow, Western, Sargent's List ..... dis 55&10%
Cow, Kentucky, Sargent's List ..... dis 55&10%
Cow, Moore's or Dodge's, Genuine Ky., new list:
Nos. 0 1 1½ 2 3 5 5 6 Hog } dis. 60 &
$12 $10 $9 $8 $7 $4 $3.50 $2.50 $5 } 10%
Cow, Texas "Star" ..... dis 40%

BELLOWS.

Blacksmith's Common ..... dis 50%
Molder's ..... dis 25%
Hand Bellows ..... dis 25%

BLIND FASTENERS.

Francis ..... dis 20%
Mackrell's ..... ℔ doz pairs $1.00, dis 10%
Van Sand's Screw Pattern ..... $9 ℔ gross, net
Van Sand's Old Pattern. 1¼, $8; 1½, 8.50 ℔ gro. net
Merriman's ..... new list, net
Zimmerman's, 10¾ in ..... ℔ gross $26.00
Zimmerman's, 9 in ..... ℔ gross $24.00
Zimmerman's, without screws ..... $5.00 less

BLIND STAPLES.

Barbed, ½ in. and larger ..... ℔ lb 11c net
Barbed, ⅞ in ..... ℔ lb 13c net

BLOCKS.

Penfield Block Co., Rope and Iron Strap'd. . dis 40%

BOLTS.

Cast Iron Barrel Shutter, &c. ..... dis 55&10%
Cast Iron Chain (Sargent's list) ..... dis 60&10%
Wrought Barrel ..... dis 55&10%
Wrought Square ..... dis 55&10%
Wrt. Shutter, all Iron, Stanley's list ..... dis 50&10%
Wrt. Shutter, Brass Knob, Stanley's list .. dis 50&10%
Wrought Shutter, Sargent's list ..... dis 55&10%
Wrought Sunk Flush, Sargent's ..... dis 65&10&10%
Wrought Sunk Flush, Stanley's ..... dis 40&10%
Wrought B. K. Flush, Stanley's ..... dis 50&10%
Carriage and Tire, Common, new list ..... dis 75%
Carriage and Tire, Philadelphia Pattern ..... dis 50%
Carriage Bolts, Clarke's ..... dis 80%
Norway ..... dis 75%
R. B. & W. Carriage (old list) ..... dis 65%
Tire, American Screw Co's., Phila ..... dis 80%
Tire, "Bay State" ..... dis 70% new list
Eagle Philadelphia Tire Bolt ..... dis 82½%
Stove ..... dis 60%
Plow ..... dis 50&10%
Machine ..... dis 70%
Bolt Ends and Lag Screws ..... dis 70%

BORAX.

15c ℔ lb net.

BRACES.

Q. S. Backus ..... dis 50%
Barber's ..... dis 40&5%
Spoffard's Patent ..... dis 50&5%
Ive's Patent Braces ..... dis 50%
Common Ball (American) ..... dis 55%
Amidon's ..... dis 50%

BORING MACHINES—WITHOUT AUGERS.

Sweet & Clark upright, 3.60 angular ..... 4.40 net
Lawrence " 3.00 " ..... 3.50 net
Hubbard " 3.00 " ..... 3.20 net
Phillips, with Augers ..... 7.00 7.50 ..... net

BRACKETS.

Shelf, plain ..... dis 50&10%
Shelf, fancy ..... dis 55&10%

BRIGHT WIRE GOODS.

New list ..... dis 70&10%

BULL RINGS.

Union Nut Co. ..... dis 55%
Sargent's ..... dis 60&10%
Humason, Beckley & Co's. ..... dis 60&10%

BUTTS.

Wrought Brass ..... dis 75%
Cast Brass, Fast Joint ..... dis 20&10%
Cast Brass, Loose Joint ..... dis 10&10%
Fast Joint, Narrow ..... dis 45&10&10%
Fast Joint, Broad ..... dis 45&10&10%
Loose Joint ..... dis 60&10&10%
Loose Joint, Japanned ..... dis 60&10&10%
Loose Joint, Jap, with Acorns ..... dis 60&10&10%
Parliament Butts ..... dis 60&10&10%
Mayer's Hinges ..... dis 60&10&10%
Loose Pin, no Acorn ..... dis 60&10&10%
Loose Pin, Acorns ..... dis 60&10&10%
Loose Pin, Acorns, Japanned ..... dis 60&10&10%
Loose Pin, Acorns, Jap'd, Plated ..... dis 60&10&10%
Tips

Wrought Iron.

Fast Joint, Narrow ..... dis 60&10%
Fast Joint, Lt. Narrow ..... dis 60&10%
Fast Joint, Broad ..... dis 60&10%
Loose Joint, Broad ..... dis 60&10%
Table Butts, Back Flaps, &c. ..... dis 60&10%
Inside Blind, Regular ..... dis 60&10%
Inside Blind, Light ..... dis 60&10%
Loose Pin, Wrt ..... dis 60&10%
Loose Pin, Light ..... dis 60&10%
Spring Hinges—
Geer's Spring and Blank Butts ..... dis 25%
Clarke Hardware Co's ..... dis 50&10%
American Spring Hinge Co's ..... dis 25%
Gem Spring Hinges ..... dis 25%
Blind Butts, Shepard's, Nos. 50 and 60. ..... dis 70%
Blind Butts, Shepard's, No. 050. ..... dis 70&5%
Blind Butts, Shepard's No. 75 ..... dis 70&10%
Blind Butts, Lull & Porter ..... dis 75%
Blind Butts, Huffer ..... dis 50
Blind Butts, Clark's, Nos. 1, 3, 5 ..... dis 70&10
Standard Lull & Porter ..... dis 75%

BOW PINS.

Humason, Beckley & Co's ..... dis 55&5%
Sargent & Co's ..... $19.70 and 21.40; dis 66&10%
Hotchkiss ..... dis 25%

BUTCHER'S CLEAVERS.

Humason & Beckley Mfg. Co. ..... dis 25%
Bradley's ..... dis 25%
Beatty's ..... dis 25&5%

1	2	3	4	5	6	7	8
$16.50	19.00	21.50	24.00	27.00	30.00	33.50	36.50

CAN OPENERS.

American ..... ℔ gross $7.50, dis 10%
New Idea ..... $15.00 gross
No. 4, French ..... ℔ doz $2.25, dis 55%
No. 5, Iron Handle ..... ℔ gross $7.50, dis 10%
Sardine Scissors ..... ℔ doz $7.00, dis 55%
Sprague, No. 1, $2; No. 2, 2.25; No. 3, 2.50; dis 50&10%
Universal ..... ℔ doz $3.00, dis 33⅓%

CAPS, PERCUSSION, ℔ 1,000.

U. M. C., F. C. trimmed ..... 50c } dis 10&10%
U. M. C., F. L. ground ..... 70c }
U. M. C., Cen. fire ground ..... 70c } dis 10&5%
U. M. C., Double W. Proof ..... $1.40 }
G. D. & S. B. ..... 33c. dis 10%
E. B. 1-10, Eley's 60c
Musket, in 1-10's 55c
Hicks Ground Edge in Brass Boxes 55c

CARTRIDGES.

Rim ..... dis 50@10%
Central Fire, pistol size ..... dis 33⅓%
" " Military ..... dis 25%
B. B. Caps, Round Balls 1.75
" Swaged Conical 1.90

NEW LIST ON CARTRIDGES.

Rim-fire,	22 short	$ 5	long	$ 6.00
"	32 "	10	"	15.50
"	38 "	18	"	18.00
"	41 "	15	"	17.50

Central Fire—32, $11.00; 38, $13.50; 41, 15.00; 44, $19.

CARDS.

Horse and Curry, new list, July, 1881 ..... dis 10%
Cotton, new list, July, 1881 ..... dis 10%
Wool, new list, July, 1881 ..... dis 10%

CARPET STRETCHERS.

Cast Steel, Polished ..... ℔ doz $5.00, dis 30%
Cast Iron, Steel Points ..... ℔ doz $2.00, dis 50%
Bullard's ..... dis 25%

CASTERS.

Bed ..... dis 47½&10%
Plate and Shallow Socket ..... dis 47½&10%
Deep Socket ..... dis 25&10%
Martin's Patent (Phœnix) ..... dis 25%

CATTLE LEADERS.

Humason, Beckley & Co's ..... dis 60&10%
Sargent's ..... dis 60&10%
P. S. & W. ..... dis 25&10%

CHAIN.

German Halter and coil Chain ..... dis 50&10%
Trace, Breast and Fancy ..... dis 45&5%
Oneida Halter Chain (old list) ..... dis 45&5%
Galvanized Pump Chain ..... ℔ lb 8c net
Jack Chain, Iron ..... dis 60&10%
Jack Chain, Brass ..... dis 50&10%

CHALK.

White ..... ℔ gross 60c net
Red ..... ℔ gross 85c net
Blue ..... ℔ gross $1.00 net
White Crayons ..... ℔ gross 9c net

COTTON LINES.

Cotton Fish Lines ..... dis 33⅓%
Cotton Chalk Lines, 20 feet:

Nos. 11,	13,	15,	17,	20,	dis 33⅓%
3.20.	3.60.	4.00.	4.50.	5.25.	dis 33⅓%

CHISELS.

Socket Framing, Crossman ..... dis 65&5%
Socket Framing, P. S. & W. ..... dis 70&10%
Socket Framing, Douglass' ..... dis 70&10%
Socket Firmers, Crossman ..... dis 65&5%
Socket Firmers, Ohio Tool Co. ..... dis 60&10%
Socket Firmers, Douglass' ..... dis 70&10%
Socket Corner ..... dis 70&10%
Tanged Firmers ..... dis 40&45%
Tanged Firmers, Butcher's ..... $5.00@$5.25 to ℄
I. Merrill's Socket and Framing Chisel ... dis 65&10%

CLAMPS.

Iron, Screw, Eagle ..... dis 50%
Iron, Adjustable, Stearns' ..... dis 20&10%
Iron, Cabinet, Sargent's ..... dis 65&10%
Iron, Carriage maker's, Carr & Crawley ..... dis 25%

CLIPS, AXLE.

Norway or Best ..... dis 60&5%
Superior ..... dis 45&5%
Conestogo ..... dis 60&10%
Coal Hods—Griffiths' ..... dis 40%

COCKS, BRASS.

Racking, new list, July 10, 1880 ..... dis 50&10%
Globe, new list, July 10, 1880 ..... dis 50&10%
Plain Bibbs, new list, July 10, 1880 ..... dis 50&10%
Ale and Beer, new list, July 10, 1880 ..... dis 50&10%

COFFEE MILLS.

Parker's ..... dis 45%
Wilson's ..... dis 50%
Logan & Strobridge ..... dis 45%
Enterprise Mfg. Co. ..... dis 25%

COMPASSES, DIVIDERS, &c.

Compasses ..... dis 55%
Calipers ..... dis 55%
Dividers ..... dis 55%
Cook's Pencil ..... dis 10%

COOPERS TOOLS.

Bradley's ..... dis 15@20%
Barton's ..... dis 20%

CROW BARS.

Cast Steel ..... ℔ lb 6c
Iron, Steel Points ..... ℔ lb 4c

CURLING IRONS, &c.

½, ⅝, ¾ in., $1.80, 2.00, 2.50 ..... dis 10%
Curling Tongs ..... ℔ doz $3.65, dis 10%
Pinching Irons ..... ℔ doz $7.50, dis 20%

CURRY COMBS.

Fitch's new list ..... dis 50%
Hotchkiss, Novelty, new list, July, 1880 ..... dis 25%
Hotchkiss, Excelsior Superior Champion ..... dis 25%
Lawrence, "Perfect" ..... dis 25&10%
Rubber ..... ℔ doz $10.00, dis 25%
Sweet & Clarke ..... dis 50%
Lusters ..... dis 25%

CURTAIN PINS.

Silvered Glass ..... net
White Enamel ..... net

CUTLERY.

Association (Table) ..... net
Naugatuck Cutlery Co ..... list net
Excelsior Knife Co. ..... net
Wilson's Butcher and Shoe Knives ..... dis 30%
Ames' Shoe Knives ..... dis 15%
Wm. Rogers Mfg. Co., Plated Cutlery ..... Net

DOG COLLARS.

Embossed Gilt ..... dis 20%
Leather ..... dis 25%
Brass ..... dis 25%

DOOR SPRINGS.

Torrey's Rod, regular size, ℔ doz., $3 .. dis 40&10%
Gem (Coil):
No. 1, Large Japanned ..... ℔ doz $4.00 } dis 40%
No. 2, Medium Japanned ..... ℔ doz 2.75 }
No. 3, Small Japanned ..... ℔ doz 2.00 }
No. 4, ("Shoo Fly") Screen door size, 1.50 } dis 50%
No. 5, Screen door size ..... 2.00 }
No. 6, Medium ..... 2.75 }
No. 7. Large ..... 4.00 }
Standard—10 doz $1.25; 9 doz $1.75 ..... dis 50&10%
8 doz 2.50; 6 doz $3.50 ..... dis 50&10%
Hercules ..... dis 50&10%

DRAWING KNIVES.

Ohio Tool Co. ..... dis 60&10%
Crossman's No. 1 ..... dis 65&5%
Nobles Mfg. Co. ..... dis 15%
Bradley's ..... dis 35%
Adjustable Handle ..... dis 20%
P. S. & W. ..... dis 70&10%
Douglass ..... dis 70&10%

DRILLS AND DRILL STOCKS.

Blacksmiths' ..... each, $2.50, dis 10%
Blacksmiths' Self-Feeding ..... each, 7.50, dis 20%
Breast, P. S. & W. ..... dis 20&10%
Breast, Wilson's ..... dis 20%
Breast, Millers Falls ..... each, $3.00, dis 25%
Breast, Bartholomew's ..... each, $2.50, dis 25&10%
Wilson's Drill Stocks ..... dis 10%
Automatic Boring Tools ..... each, $2.25, dis 20%

EGG BEATERS.

Dover ..... ℔ doz $2.50, dis 25%
Medallion ..... gross, $10.00
Victoria ..... gross, $10.00

EMERY AND EMERY PAPER.

Regular numbers ..... ℔ lb 6c
Flour and F. F. ..... ℔ lb 4c
B. & A. Emery Paper ..... dis 30&5%

ENAMELED AND TINNED WARE.

Kettles ..... dis 60%
Sauce Pans ..... dis 40%
Tinned Sauce Pans ..... dis 40%
Escutcheon Pins—Brass ..... dis 50%

ESCUTCHEONS.

Door Lock ..... Same discounts as Door Locks
Brass Thread ..... dis 25%
Wood ..... dis 25%

FAUCETS.

Fenn's ..... dis 40%
Fenn's Cork Stops ..... dis 33⅓%
Star ..... dis 55&10%
Frary's Patent Petroleum ..... dis 20&10%
West's Patent Key ..... dis 45%
Anchor Lock ..... dis 45%
Metallic Key, Leather Lined ..... dis 60%
Cork Lined ..... dis 70%
J. Sommer's Best Metallic Key ..... dis 40%
J. Sommer's Cork Lined, 1st quality ..... dis 50%

FILES.

E. M. Boynton's ..... new list, dis 25%
Western File Co. ..... dis 45%
Butcher's ..... $4.50 to ℄
Moss & Gamble ..... $4.50 to ℄
H. Disston & Sons (new list) ..... dis 40%
Heller Bros.' Horse Rasps ..... dis 30&10%
Nicholson ..... dis 50&10%
New American ..... dis 50&10%
Union File Co. ..... dis 45%
Stubs, new list ..... $7.50 to ℄, 25% off

FLUTING MACHINES.

Knox, 4½-inch Rolls ..... $3.50 each } dis 35%
Knox, 6-inch Rolls ..... $4.00 each }
Knox, 8-inch $6.50
Eagle, 3½-inch Roll ..... $2.15, dis 35%
Eagle, 5½-inch Roll ..... 2.85, dis 35%
Crown, 4½-in., $3.50; 6, $4.00; 8, $6.50 each ... dis 35%
Crown Jewell ..... 6-in., $3.40 each ..... dis 35%
American, 5-in., $3; 6-in., $3.40; 7-in., $4.50 each dis 35%
Domestic Fluter ..... $1.50 each, net
Geneva Hand Fluter, White Metal, ℔ doz $12 dis 25%
Crown Hand Fluter, Nos. 1, $15; 2, $12.50;
3, $10.50; 4, $8.25 ℔ doz ..... dis 35%
Combined Fluter and Sad Iron, ℔ doz $15.00, dis 30%

FORKS.

Lawson & Brenizer ..... dis 50&10%
Remington ..... dis 50&10%
Sheble & Fisher ..... dis 50&10%

FRY PANS.

Burnished list as follows ..... dis 60&10&10%

No	0	1	2	3	4	5	6	7	8
℔ doz	$3.00	3.75	4.25	4.70	5.25	6.00	7.00	8.00	9.00

GAUGES.

Marking, Stanley's ..... dis 50&10%
Marking, Chapin's ..... dis 55&10%
Wire ..... dis 10&10%
Wire, Disston's ..... dis 20%
Wire, Wheeler, Madden & Co. ..... dis 10%

GIMLETS.

Nail and Spike ..... dis 40%
"Eureka" Gimlets ..... dis 50%
"Diamond" Gimlets ..... dis 50%
Double Cut, Shepardson's ..... dis 50%
Double Cut, Hartwell's ..... dis 50%
Double Cut, Ives' ..... dis 50%
Double Cut, Douglass' ..... dis 33⅓%
"Reel" ..... ℔ gro. $12.00, dis 25%

GLUE POTS.

Tinned and Enameled ..... dis 35%
Family, Howe's "Eureka" ..... dis 25%
Family, L. F. & C.'s "Handy" ..... dis 30%

GRINDSTONE FIXTURES.

Sargent's Patent ..... dis 70&10%
Reading Hardware Co. ..... dis 25&10%

GUN WADS.

Eley's B. E. wads, 11 upwards $1.75
" " " 9 and 10 ..... 2.00
" " " 7 " 8 ..... 2.25
" P. E. " 11 upwards 2.90
" " " 9 and 10 ..... 3.65
" " " 7 " 8 ..... 4.45

HAMMERS.

Maydole's ..... dis 15%
Hartford Hammer Co. ..... dis 25%
Magn'c Tack, Nos. 1,2,3, 1.26, 1.50 and 1.75. dis 25&10%
Warner & Noble's ..... dis 5%
Kip's or Selsor's ..... dis 30%
Yerkes & Plumb ..... dis 15%

HANDLES.—Door or Thumb Latches.

Nos. .. 0 1 2 3 4
Per doz. .$0.80 1.00 1.18 1.35 1.50. ..... dis 55&10%
Roggin's Latches ..... ℔ doz 35c.@40c. net
Bronze Iron Drop Latches ..... ℔ doz $0.90@1.10
Jap'd Store Door Handles—Nuts, $1.25; Plate, $2.00; no Plate, $1.10 ..... dis 10%
Barn Door ..... ℔ doz $1.60, dis 10%
Wrought Chest ..... dis 65&10%
Surface Chest ..... dis 55&10%
Flush Chest ..... dis 55&10%
Lifting ..... dis 50&10%
Saw and Plane ..... dis 40&10%
Lippincott Cross-Cut Saw ..... 22c. per pair
Hammer and Hatchet ..... dis 20%
Brad Awl ..... ℔ gross, $3.00, dis 20&10%
Chisel, all kinds ..... dis 50&10%
Auger, assorted, ℔ gross $4.50
Auger, large, ℔ gross 5.00
Patent Auger, Ives' ..... dis 25%
Patent Auger, Douglass' ..... ℔ set $1.25 net
Patent Auger, Swan's ..... ℔ set 1.00 net

HAMMOCK CHAIRS.

White Mountain, per doz $36.00
" " Finished in red, per doz $42.00

HANGERS.

Barn Door, old patterns ..... dis 60&10%
Barn Door, New England ..... dis 60&10%
Climax (Anti-Friction) ..... dis 50%
Warner's ..... dis 20%
Richard's ..... dis 20%

HATCHETS.

Underhill's 35%
Haines' Solid Steel 30%
Shingling, Nos. 1 2 3 ..... ℔ doz $7.25 $8.00 $9.75
Claw, Nos. 1 2 3 ..... ℔ doz 7.75 8.50 9.25
Lathing, Nos. 1 2 3 ..... ℔ doz 7.50 8.00 8.50
Hammond's new list ..... dis 45%
Blood's ..... dis 35%
Hunt's ..... dis 30%
Russel's, low list ..... dis 40%
Cohoes Bench Broad Adzes 40%

HAY KNIVES.

"Lightning" ..... ℔ doz $20.00 net 5%
Wadsworth's ..... dis 30%

HINGES

Plate Hinges { 8, 10 & 12 in. ..... 5½c. ℔ lb.
"Providence" { over 12 ..... 4½c. ℔ lb.
Screw Hook { 8, 10, 12 in. ..... 4 c. ℔ lb.
and Strap. { 14 to 36 in. ..... 3 c. ℔ lb.
Crown spring hinges, for screen doors, dis 60%; for for solid doors, single action, dis 45%; for solid doors, double action, dis 55%.
Crown Screen Door Latch ..... ℔ gross $12, dis 55%
Crown Christmas-Tree Holders, 2-inch, ℔ doz $9; 3-inch, $12 ..... dis 45%
Bickford Portable Pump ..... each $6, dis 20%
American Cake Mixer, No. 6 ..... each $3.50, dis 20%
American Tobacco Cutter ..... ℔ doz $15, dis 30%
A. M. Co. Clothes Wringer, No. 2 rolls, 10x1¾, ℔ doz $37.50; No. 2½ rolls, 12x1¾, $48 ..... dis 20%
Heavy Welded Hook { 8@12 in. $7.50 ℔ 100 lb. } dis
{ 14 in. & up, $6 ℔ 100 lb. } 20%
Screw Hook and Eye ... { ⅞ & 1 in. ..... 9c. } dis 20%
{ ¾ in. ..... 9c. }
{ ⅝ in. ..... 10c. }
{ ½ in. ..... 12c. }
Wrought Strap & T list, Dec. 20, '77, dis 60&10&10%

HOES.

Planters ..... 60&5%
Riveted Shank ..... ℔ doz $5.00, dis 50&10
Socket ..... ℔ doz $5.25, dis 50&10%
Grub ..... dis 50%
Hick's Pat. Solid C. S. Planters' ..... dis 60&10%
Hick's Pat. Solid C. S. Scovill Pattern .... dis 60&5%
Hubbard, Bakewell & Co— ..... dis 50&10%

HORSE NAILS.

Ausable: Nos. 5 6 7 8 9 10
Plain, ℔ lb. .... 30c 27c 25c 24c 23c 22c .. dis 20&10%
Finish'd ℔ lb. 31c 28c 26c 25c 24c 23c .. dis 20&10%
Clint'n, P'n, " .... 23c 21c 20c 19c 18c .. dis 20&10%
Clint'n, Fin'd " ... 24c 22c 21c 20c 19c .. dis 20&10%
Essex, ℔ lb. ..... 31c 28c 26c 25c 24c 23c .. dis 30%
Putnam " ..... 27c 24c 22c 21c 20c 19c ... dis 5&10%
Saranac " ..... 26c 23c 21c 20c 19c 18c ..... dis 20%
Globe, " ..... 26c 23c 21c 20c 19c 18c .. dis 10&5%
N'thw'n " ..... 28c 25c 23c 22c 21c 20c .. dis 10&10%
Champlain
Forged ℔ lb. .. 31c 28c 26c 25c 24c 23c .. dis 30&10%
A. C., ℔ lb. ..... 28 25 23 22 21 21 .. dis 10,10&5%
C. B. } ..... 28c 25c 23c 22c 21c 21c .. dis 10&5%
K. }
Bridgewater ..... 24c 21c 19c 18c 17c 16c ..... dis 30%
New Haven ..... 31c 28c 26c 25c 24c 23c .. dis 30&10%
Capewell ..... 31c 26c 26c 25c 24c 23c .. dis 20&10%

HORSE SHOES.

Burden ..... ℔ keg $2.87½
R. I. Horse Shoe Co., Perkin's Improved, Light, Medium and Heavy ..... ℔ keg $3.87½
Mule Shoes ..... ℔ keg $4.87½
Walker's—Forged: (Light, Medium and Heavy.)
Horse ..... ℔ keg $3.87½
Mule ..... ℔ keg $4.87½
Bryden Forg'd Heel & Toe Horse Shoes, $4.87 ℔ kg. } dis 5%
" " " " Mule " $5.87 " }
Bryden Steel Mule Shoes, $6.75 ℔ keg ..... dis 5%
Diamond State Horse Shoes ..... $3.87½ ℔ keg
Diamond State Mule Shoes ..... $4.87½ ℔ keg
OX SHOES—Mt. Carmel Ox Shoes ..... 10 cts. ℔ lb.

ICE CREAM FREEZERS.

Peerless—3 quart, $4.50; 4 quart, $5.50; 6 quart, $7; 8 quart, $9; 10 quart, $12. The Grooch Patent "Giant"—14 quart, $20; 18 quart, $25; 21 quart, $30; 25 quart, $35; 32 quart, $40; 42 quart, $45. Discount 50%.
American—2 quart, $2.75; 3 quart, $3.25; 4 quart, $3.75; 6 quart, $5 each ..... dis 45%
Crown, single action, 2 quart, $3.75; 3 quart, $4.50; 4 quart, $5.50; 6 quart, $7; 8 quart, $9; 10 quart, $11; 14 quart, $14 ..... dis 45%
Crown, double action, with crank, 8 quart, $10.50; 10 quart, $13; 14 quart, $16.50; 18 quart, $21; 24 quart, $25. With fly wheel, 8 quart, $13; 10 quart, $16; 14 quart, $20; 18 quart, $25; 24 quart, $30; 32 quart, $37.50 ..... dis 45%
Star, double action, 2 quart, $3.75; 3 quart, $4.50; 4 quart, $5.50; 6 quart, $7; 8 quart, $9; 10 quart, $11; 14 quart, $14 ..... dis 45%
Gem, double action, 2 quart, $3.75; 3 quart, $4.50; 4 quart, $5.50; 6 quart, $7; 8 quart, $9; 10 quart, $11; 14 quart, $14 ..... dis 55%
Crown Ice Chipper ..... ℔ doz $7.50, dis 35%

KNOBS.

Carriage, (Jap'd 80 c ℔ gross) ..... dis 60&10%
Base—Common ..... dis 30&10%
Hemacite Door Knobs ..... new list, dis 35&5%
Door Mineral } Same discounts as Door Locks.
Door Por. Jap'd
Door Por. Plated.
Door Por.
Furniture Plain ..... 75c gross inch, dis 10%
Furniture, Wood Screws ..... dis 20%
Picture ..... dis 50&10%
Hemacite, Picture ..... dis 35%
Shutter, Porcelain ..... dis 50&10%

LADLES.

Melting & Skimming, Monroe's Pat. ℔ doz $4 .. dis 40%
Melting, C & C ..... dis 30&10%

LAWN MOWERS.

Buckeye, Easy and Excelsior, new list.....dis 30 %

LINES.

Linen Fish.....dis 25&10 %
Wire Clothes, Galvanized, 100 feet.....℔ doz $3.00

LOCKS AND LATCHES.

Cabinet, Eagle } Changes made in list price
Cabinet, Gaylord } of some numbers Jan. 1,
Cabinet, Bridgeport } 1881, dis 25&2 %
Cabinet, P. & F. Corbin.....dis 40 %
Trunk, new list, Jan 1, 1881.....dis 15&2 %
Yale Lock Co., Flat Key.....dis 40 %
Plate.....dis 33⅓&2 %

DOOR LOCKS, ETC.

Bradford
Norwalk
Norwich
P. & F. Corbin
Russell & Erwin
Mallory, Wheeler & Co.
} List prices as revised Dec. 10th, 70&2% for cash.
Padlocks—Russell & Erwin
Mallory, Wheeler & Co.
Norwich Lock Manf. Co.
Wm. Wilcox & Co.
} dis 45 % and 2% for cash.
Wm. Wilcox & Co's Plate Locks.....dis 33⅓ %
Yale Lock Manf. Co's "Standard".....dis 40 %
Romer's.....dis 25@40 %
Conestoga.....dis 75 %
Scandinavian, "Norwich".....dis 50&10 %

MALLETS.

Penfield Block Co., Apple, Hickory and Lignumvitæ.....dis 30 %

MEAT CUTTERS.

Dixon's (P. S. & W.) Nos. 1 2 3 4.
℔ doz $14 $17 $19 $30–dis 35 %
Perry's, Nos. 1 2 3 4 4 gr'd 5 gr'd
Each.....$3 4 5 11 13 36 dis
Woodruff's (P. S. & W.).....Nos. 100 150
℔ doz. $15 18–dis 35 %
Hales'.....Nos. 11 12 13
℔ doz. $27 35 45–dis 50&10&2 %
Kieser's No. 55.....$40 ℔ doz dis 40 %
Kieser's Gem.....$25 ℔ doz dis 40 %
Kieser's No. 82.....$40 ℔ doz dis 40 %
Kieser's Monarch.....$45 ℔ doz dis 40 %
Beef Shaver, (Enterprise Manf. Co.).....dis 25 %

MOLASSES GATES.

Stebbins Patterns.....dis 70&10 %
Stebbins Genuine.....dis 67½&10 %
Stebbins Tinned Ends.....dis 40&10 %
Chase's Hard Metal.....dis 50&10 %
Self-Measuring, (Enterprise).....dis 20 %
Lincoln's Pattern.....dis 60&10 %
Weed's.....dis 15 %
Boss Nos. 1 2 3 4
$7 $8 $9 10....℔ doz
Boss, Japanned Finish.....dis 60&10&10 %
Boss, Bronze Finish.....dis 50&10&10 %

NUTS AND WASHERS.

Square Nuts.....8 c off list.
Hexagon Nuts.....8½c off list.
Washers.....7½c off list.

OILERS.

Zinc and Tin.....dis 60&10 %
Brass and Copper.....dis 50 %
Malleable (Hammer's).....℔ doz $5, dis 10 %

PINKING IRONS.

Per dozen.....75 cts. net

PLAITING MACHINES.

Astor Plaiting Machine.....each $15, dis 20 %
Crown Plaiting Machines.....dis 25 %
6 in., $6; 10 in. $8 each.

PLANES AND PLANE IRONS.

Bench, First Quality.....dis 20 %
Bench, Second Quality.....dis 25 %
Molding.....dis 15 %
Bailey's (Stanley R. & L. Co.) New list, Jan. 1879 dis 20&10 %
The Stanley (S. R. & L. Co.) new list, January 1879.....dis 20&10 %
Bailey's.....dis 20&10 %
Plane Irons, Butcher's.....$5.50 to £
Plane Irons, Auburn Tool Co.....dis 20 %
Plane Iron, Ohio Tool Co.....dis 20 %
Plane Irons, Sandusky Tool Co.....dis 20 %

PLIERS AND NIPPERS.

Button's Patent.....dis 33⅓ %
Hall's Pat. Compound Lever Cutting Nippers, No. 2, 5 in. $13.50; No. 4, 7 in., $21 ℔ doz..dis 25 %
Gas Pliers.....dis 50 %

PLUMBS AND LEVELS.

Disston's.....dis 40 %
Stanley R. & L. Co.'s Pat. Adjustable....dis 65&10 %
Stanley R. & L. Co.'s Non-Adjustable....dis 65&10 %
Chapin's Patent Adjustable.....dis 65&10 %
Chapin's Non-adjustable.....dis 65&10 %
Standard Rule Co.'s New Adjustable.....dis 65&10 %
Standard Rule Co.'s Non-Adjustable.....dis 65&10 %
Pocket Levels.....dis 65&10 %

RAIL.

Sliding Door, Wrought Brass.....℔ ℔. 43c. dis 30 %
Sliding Door, Bronzed Wrt. Iron...℔ ft. 12c. dis 35 %
Sliding Door, Iron, Painted.....℔ ft. 4c. dis 10&10 %
Barn Door....inch.....½ ⅝ ⅞
Per 100 feet..$2.60 3.60 5.60–dis 10 %
B. D. for N. E. Hangers—
Small. Med. Large.
Per 100 feet.....$2.10 2.70 .30 net.

RIVETS.

Iron and Tinned, new list, Dec. 10, 1881.....dis 40 %
In bulk, new list, Dec. 10, 1881.....dis 40 %
Copper Rivets and Burrs.....dis 45 %
Nos. 7 8 9 10 11 12 13 14 15
℔ ℔.. 49c. 50c. 52c. 54c. 56c. 58c. 60c. 65c. 70c.
RIVET SETS.....dis 40 %

RODS.

Stair, Brass.....dis 25 %
Stair, Black Walnut.....60c. ℔ doz.—net

RULES.

Boxwood. Ivory.
Chapin's
Standard } dis 75 % } dis 40&10 %
Stanley
Stevens & Co.....dis 70&10%. Ivory.....dis 50 %
Stevens & Co. Miscellaneous.....dis 50&10 %

SAD IRONS.

Self-Heating, Charcoal.....℔ doz 9.00 net
Mrs. Pott's Irons.....dis 35 %
Enterprise Star Irons, new list, July 20, '82....dis 35 %
Comb'd Fluter and Sad Iron....℔ doz $15.00, dis 15 %
Common Sad Irons.....2¾c ℔ ℔

SAND PAPER.

Baeder & Adamson's Flint, 00@1½..$4,50 ℔ r'm.
Baeder & Adamson's Flint, 2, 2½&3..5.00 ℔ r'm.
Baeder & Adamson's Flint, Assort'd 4.75 ℔ r'm.
Baeder & Adamson's Star.....3.75 ℔ r'm.
Baeder & Adamson's Emery ℔ r'm $6.50@11.50
} dis 35 %
J. Bartle's Sand, Flint and Emery Paper ..dis 30&5 %

SASH CORD.

Common.....℔ ℔, 14c. net
Patent.....℔ ℔, 17c@18c. net
Silver Braided Lake Hemp.....℔ ℔, 50c, dis 10 %
Silver Braid, Lake White Cotton, ℔ ℔, 50c. dis 10 %
Silver Braided Lake Drab Cotton, ℔ ℔. 55c. dis 10 %
Silver Lake Cable Laid, Bengall Unbleached Hemp, 17 cts.....dis 10 %
Russian Hemp, 19 cts.....dis 10 %
Italian Hemp, 34 cts.....dis 10 %

SASH WEIGHTS.

Solid Eyes, in 500-℔. lots and over, ℔ ℔. 1¼c. net

SAUSAGE STUFFERS OR FILLERS.

Miles.....℔ doz. $20, dis 25&5 %
Perry.....℔ doz., No. 15; No. 0, $21....dis 35 %
Enterprise Mfg. Co.....dis 25 %
Monarch.....dis 40 %

SAWS.

Boynton's Lightning Cross Cuts, new list....dis 40 %
Boynton's Circular and Mill.....dis 40 %
Boynton's Ice.....dis 25 %
Boynton's Lightning Hand, Panel and Rip...dis 25 %
Disston's Circular.....dis 40 %
Disston's Mill.....dis 40 %
Disston's Cross Cut.....dis 40 %
Disston's Hand, Panel, Rip, &c.....dis 20 %
Hubbard, Bakewell & Co. Circular Saws...dis 40&5 %
Hubbard, Bakewell & Co. Cross Cut.....30c. ft.
Hubbard, Bakewell & Co., One-Man's, X Cut dis 40&5 %
Hubbard, Bakewell & Co., Mill Saws.....dis 40&5 %
Peace Circular and Mill.....dis 40 %
Peace Hand, Panel and Rip.....dis 25 %
Peace Cross Cuts.....dis 35 %
Peace Band Saws, all widths.....dis 10 %
Webster Cross Cut, with handles,....dis 25&10&10 %
Griffin's Hack Saws and Blades.....dis 30 %

SAW FRAMES.

White.....℔ doz $1.05, dis 10 %
Saw Rods.....$10 list, dis 10&10 %

SAW SETS.

Stillman's Genuine, ℔ doz $3.50 and $5.50....dis 10 %
Stillman's Imitation.....℔ doz $3.25, dis 30&10 %
Common Lever.....℔ doz $2.00, dis 30&10 %
Leach's.....No. 0, $8.00; No. 1, $15; dis 15 %
Hammer, Hotchkiss.....$5.50, dis 10 %
Aiken's Genuine.....$13.00, dis 50&10 %
Aiken's Imitation.....$7.00, dis 50 %
Disston's.....dis 20 %
Morrill's.....No. 1, $15; No. 5, $52; dis 35&10 %

SCALES.

Hatch, Counter, No. 171....℔ doz $42, dis 37½&10 %
Hatch, Tea, No. 161.....℔ doz $15.00, dis 37½&10 %
Union Platform, Keystone.....$6, dis 45 %
Chicago Scale Co.....Special dis
Fairbanks'.....dis 20 %
Forsyth Scale Co.....dis 45 %
Howe's.....dis 20&10 %
Chatillon's Grocers'.....dis 40 %
Chatillon's Eureka.....dis 25 %
Family Universal.....dis 50 %
Family Favorite.....dis 30 %
Family Turnbull's.....dis 30 %
Scale Beams, List of Jan. 12, 1882.....dis 50 %

SCRAPERS.

Adjust. Box Scraper (S. R. & L Co.) $6.50, dis 20&10 %
Box, 1 Handle.....℔ doz $4, dis 10 %
Box, 2 Handle.....℔ doz $6, dis 10 %
Foot.....dis 45&10 %
Ship, common.....℔ doz $3, net
Wilson Mfg. Co.....dis 10 %

SCREW DRIVERS.

Douglas Mfg. Co.....dis 20&10 %
Disston's.....dis 40 %
Cowles Mfg. Co.....dis 50&10&10 %
Stanley Rule & Level Co's. Var. Hdls....dis 50&10 %
Stanley Rule & Level Co.'s Black Hdls...dis 40&10 %
Ratchet.....dis 33⅓ %
Clark's Patent.....dis 25 %
Shepardson.....dis 25 %

SCREWS.

Flat Head Iron, list Jan. 1, '85.....dis 80 %
Round Head Iron.....dis 75&16 %
Flat Head Brass.....dis 25&10 %
Round Head Brass.....dis 75 %
Flat Head Blued, add 2½ % to net of invoice.
Brass and Silver Capped.....dis 40 %
Japanned, list of Plain Screws.....dis 72½ %
Coach, Patent Gimlet Point.....dis 75 %
Coach, Common or Lag.....dis 60&10&10 %
Bed.....dis 10 %
Machine, Flat Head, Iron.....dis 55 %
Machine, Round Head, Iron.....dis 50 %
Bench, Iron.....dis 50&10 %
Bench, Wood, Beach.....℔ doz $3.00, dis 10 %
Bench, Wood, Hickory.....dis 20&10 %
Hand, Wood.....dis 20&10 %
Hand Rail, Sargent's.....dis 60&10 %
Hand Rail, Humason, Beckley & Co.'s...dis 40&10 %
Hand Rail, Am. Screw Co., list Jan. 1, '81....dis 70 %
Jack (Wilson's).....dis 25 %

SCREEN FRAMES AND FIXTURES.

Standard Window Screens No. 1, ℔ doz $4; 2, $5
" Door " No. 5, $15; dis 40&10 %
" Window Corner Irons, No. 3, doz. st's, $2
" Door " " No. 6, " " $3
dis 40&10 %
" Door Latches, ℔ dozen, $3.60.....dis 50 %
Porter's Patent Window and Door Screen Frames;

PER DOZ. SETS.

	In White.	Im. Bl'k Walnut.	
No. 20	$2.75	$3.25	dis 33⅓ %
No. 21	2.25	4.00	
No. 22	5.50	6.75	
No. 23	6.00	7.50	
No. 30	9.00	11.00	

Porter's Corners—
No. 0. Corners and Sticks complete for a three-foot window, ℔ doz sets.....$4
No. 1. Set for Window, ℔ doz sets Bronzed, $2.40; Nickel, $5.62
No. 1½. " " ℔ doz sets, Bronzed, $3.25; Nickel, $7.50
No. 4. " " ℔ doz sets, Bronzed $4.00; Nickel, $8.00
No. ⅛. " " or door, ℔ doz sets, Bronzed, $1.20; Nickel, $3.00
No. 4½. " " or Door, ℔ doz sets, Bronzed, $2.00; Nickel, $4.00
No. 2½. " Door, ℔ doz sets, Bronzed, $6.75; Nickel, $15.00
No. 3. " " ℔ doz sets, Bronzed, $12.00; Nickel, $24.00
} dis 33⅓ %

SHEARS AND SCISSORS.

American (Cast) Iron.....dis 70&10 %
Pruning.....see Pruning Hooks and Shears
Barnard's Lamp Trimmers.....℔ doz $4.00
Tinners'.....dis 15 %
Conn Shears.....dis 80 %
Norfolk Shear Co.....dis 75 %
Jersey Shears.....dis 80 %
J. Wiss & Son, Nickle, 50&5 %; Japanned, 60&5 %

SHEAVES.

Sliding Door, M. W. & Co., List.....dis 45&2 %
Sliding Door, R. & E. list.....dis 60&10&2 %
Sliding Door, Patent Roller.....dis 60&10&2 %
Sliding Door, Pt. Roller, Hatfield's...dis 60&10&2 %
Sliding Door, Russell's Anti-Friction..dis 60&10&2 %
Also see Hangers.

SHOVELS AND SPADES.

Ames, New List, July 1, 188r.....dis 15 %
Griffiths.....dis 50&5 %
Remington's (Lowman's Patent).....dis 30 %
Rowland's.....dis 60 %
Kimballs.....dis 35 %
Lippincott, new list.....dis 20 %
Hussy, Bins & Co.....dis 15 %

SPOKE TRIMMERS.

Bonney's.....℔ doz $10, dis 40&5 %
Stearns'.....℔ doz $9, dis 20&10 %
Ives'.....No. 1, $15; No. 2, $12 ℔ doz, dis 55&10 %
Douglass'.....℔ doz $9, dis 15 %

SILVER PLATED WARE.

Wm. Rogers Manf. Co.....dis 50, 5&5 %
Holmes, Booth & Hayden.....dis 40&10&5 %
Brown Bros.....dis 40&10&5 %
Wallace's Steel Silver Plated.....dis 33⅓&10 %
Rogers Bros 1847.....dis 50 %
C. Rogers & Bro.....dis 40, 10&5 %

SILVER PLATED HOLLOW WARE.

Wm. Rogers Manf. Co.....dis 40, 15&5 %
Meriden Brittania Co.....dis 33⅓ %

SPOONS.

Britannia.....dis 60&10 %
Tinned, Iron, Table and Tea.....dis 65 %
Tinned Iron Basting.....dis 65 %
German Silver.....dis 40 %

STONE.

Hindostan No. 1, 5c.; Axe, 8c.....net
Sand Stone.....℔ ℔, 6c., dis 33⅓&10 %
Washita Stone.....No. 1, ℔ ℔., 16c. net
Washita Stone, Slips.....No. 1, ℔ ℔,, 45c. net
Arkansas.....$1.50 ℔ ℔. net

SQUARES.

Steel.....dis 50 %; full cases, dis 50&10 %
Iron.....dis 50 %; full cases, dis 50&10 %
Nickel Plated.....add $2.50&$4 ℔ doz net.
} 2% cash.
Try Square and T Bevels.....dis 50&10 %
Disston's Try Square and T Bevels.....dis 40 %

TACKS, BRADS, &C.

New List, Sept. 1, 1882.

Tinned Swedes Tacks.....dis 30 %
Tinned American Tacks.....dis 30 %
Swedes Tacks, all kinds.....dis 30 %
American Cut Tacks.....dis 30 %
Copper Tacks and Nails.....dis 30 %
Hungarian Nails.....dis 35 %
Gimp and Lace Tacks.....dis 30 %
Gimp and Lace Tacks, Tinned.....dis 30 %
Finishing Nails.....dis 25 %
Trunk and Clout Nails.....dis 25 %
Common and Patent Brads.....dis 20 %
Basket Nails.....dis 20 %
Brush Tacks.....dis 20 %
Leathered Carpet Tacks.....dis 20 %
Cigar Box Nails.....dis 20 %
Chair Nails.....dis 20 %
} Extra 10 % on all for cash.
Double-pointed Tacks.....dis 40&5 %

TAP BORERS.

Common and Ring.....dis 20 %
Ives' Tap Borers.....dis 15&10 %
Enterprise Mfg. Co.....dis 25 %

TOBACCO CUTTERS.

Enterprise Mfg. Co (Champion).....dis 25 %
Wood Bottom.....℔ doz $12.00, dis 40&5 %
All Iron.....℔ doz $9.50, dis 40&5 %
Wilson's.....dis 35 %

THERMOMETERS.

Tin Case.....dis 75&10 %
Storm Glasses.....$3.25 ℔ doz.

TOE CALKS.

Winsted.....℔ ℔ 9c. dis 5 %

TRAPS.

Game, Newhouse.....dis 35 %
Game, Oneida Pattern.....dis 60&10 %
Game, Blake's Patent.....dis 40&10 %
Mouse, Wood, Choker.....℔ doz holes, 16c
Mouse, Round Wire.....℔ doz $1.50, dis 10 %
Mouse Cage, Wire.....℔ doz $2.50, dis 10 %
Mouse, Catch-em-alive.....℔ doz $2.50, dis 10 %
Cyclon Mouse.....℔ doz 75 cts.
Ideal Mouse.....℔ doz $1.00
Rat, "Decoy".....℔ doz $10.00, dis 10 %
Delusion Mouse, per doz.....$1.50

TROWELS.

Lothrops' Brick and Plastering.....dis 25 %
Reed's Brick and Plastering.....dis 15 %
Disston's Brick and Plastering.....dis 20 %
Clement & Maynard's.....dis 20 %
Worrall's Brick.....dis 20 %
Brades & Walby's.....dis 20 %
Garden.....dis 55 %

TRUCKS (WAREHOUSE, &C.)

Handy Truck.....$2.50 net
Penfield Block Co.' list, 1882.....dis 35 %
Peerless, with Cogs, No. 3.....54.00
Peerless, with Cogs, No. 4.....66.00
Eureka, No. 2.....℔ doz 42.00

VISES.

Solid Box—Wilson's.....dis 50 %
" Trenton.....dis 45 %
" Iron City Tool Works.....dis 50 %
Bench—Wilson's.....dis 45 %
" Trenton.....dis 25 %
" Parker's.....dis 20 %
" Prentiss.....dis 25 %
" Bonney's.....dis 35 %
Well Wheels.....dis 60&10&10 %

WIRE.

Brass and Copper, list of Jan. 17, 1884.....dis 15 %
Bright and Annealed.....Nos. 0@18, dis 50&10 %
Bright and Annealed.....Nos. 19@26, dis 60&10 %
Bright and Annealed.....Nos. 27@36, dis 70 %
Coppered.....Nos. 0@18, dis 50 %
Galvanized, Nos. 0 to 18.....Market list dis 40 %
Tinned, Nos. 0 to 18.....dis 60 %
Tinned Broom Wire, Nos. 18 to 25.....dis 60 %
Annealed Fence, Nos. 8&9.....dis 55 %
Annealed Grape, Nos. 10 to 14.....dis 50@10 %
Fence Staples, Galvanized.....℔ ℔ 7@7¼c
Japanned Barb Fence.....℔ ℔ 6 c
Galvanized Barbed Fence.....℔ ℔ 6c
Buck Thorn Galvanized.....℔ ℔ 6¼c
Picture Wire.....dis 40 %
Clothes Line Wire, Galvanized.....$2.75 ℔ doz
Wire Cloth, green, drab and black....℔ sq ft 2 c net

WRENCHES.

American Adjustable.....dis 45 %
Baxter's Adjustable "S," list Jan., 1880...dis 20&5 %
Baxter's Diagonal.....dis 20&5 %
Coes' Genuine.....dis 60 %
Coes' "Mechanics".....dis 60&10 %
Coes' Pattern, Malleable.....dis 75 %
Coes' Pattern, Wrought.....dis 60&10 %
Girard Standard.....dis 50&10 %
Girard Agl.....dis 60&10 %
Always Ready.....$9.00—25 %

WRINGERS. Per doz.

Universal, XX, No. 2½.....36.00
Universal, XX, No. 2.....42.00
Universal, XX, No. 1½.....51.00
Universal, XX, No. 1.....66.00
Universal, XX, No. 8.....each 10.75
Universal, XX, No. 12.....each 20.25
Universal, XX, No. 18.....each 22.75
Universal, XX, No. 22.....each 30.25
Peerless, no Cogs, No. 1.....42.00
Peerless, with Cogs, No. 2½.....45.00
Peerless, with Cogs, No. 2.....48.00

MISCELLANEOUS.

"Diamond" Vegetable Grater.....$5.00 ℔ doz., 10 %
Rotary Knife Potato Parer.....$18.00 ℔ doz., net
Metallic Shingles.....$5.50 and $6.50 per square.
Hopper Cherry Seeders.....$5,00 ℔ doz, net

—THE—
Sigourney Drill.
Perfect, Sensitive and Strong.
Interchangeable, and has a Capacity unequalled.
MADE BY
The Sigourney Tool Co.
MANUFACTURERS OF
Special Machinery and Tools
OF THE FINEST QUALITY.
HARTFORD, - - CONN.
Baltimore Agents, MORTON, REED & Co., 58 German Street.
Send for Circular.

THE WM. ROGERS' MFG. CO.
Silver-Plated Table Ware,

We manufacture a complete line of Silver-Plated Table Ware of all descriptions, and should be pleased to send our Price-List or Catalogue to any reliable dealer.

We guarantee every piece of our ware to be just as represented.

Our guarantee card accompanies each box of goods.

Our prices are as low as any FIRST-CLASS GOODS, and our goods are equal to any made in the country.

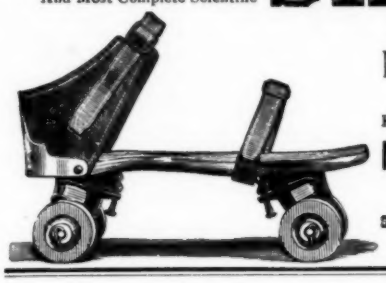
(PICKLE CASTOR.)

No. 829 L.M.

Trade Marks:
Wm. Rogers & Son.
—AND—
1865 Wm. Rogers Mfg. Co.
P. O. Address, Drawer 30,
HARTFORD, CONN.

HENLEY'S CHALLENGE ROLLER SKATE.

THE LATEST AND BEST And Most Complete Scientific **SKATES** IN THE MARKET.



HENLEY'S IMPROVED CHALLENGE

RINK AND CLUB SKATES.

LIBERAL TERMS TO THE TRADE.

For prices, circulars and further particulars, address

M. C. HENLEY, Patentee and Manufacturer,

RICHMOND, IND.

Send four-cent stamp for new forty-page Illustrated Catalogue.

☞ MENTION MANUFACTURERS' RECORD.

THE RICHMOND GLOBE ROLLER SKATE,

The Easiest Running, Most Durable, and Most Practical Skate in the Market.

Rink men and jobbers will find the "GLOBE" skate to be superior to all others, because:

It has no springs, rivets or pins to break, get loose or wear out. It will not crush the rubber cushion, as their new connecting plate prevents crushing. Our patent lock washer prevents the wearing of linch-pins and wheels running off. The wearing of the bearings being automatic, the truck frame will not become loose or rickety from long usage. The tension is easily regulated by means of the draw-bolt, to suit the requirements of any skater. The truck frame can be instantly detached without removing the draw-bolt. It is light, strong, durable, and skaters pronounce it the best skate made.

We are now working on a "CLUB" skate which will soon be ready. It will be a toe clamp, steel bottom, elegantly plated with nickel, will be the handsomest skate in the country, and will have all the excellent points of the rink skate.

P. S.—Our new Patent Steel Bottom is so formed that it can be made of very light material, and yet have all the strength neccessary.

For prices and catalogues, address

MITCHELL & VANNEMAN,

RICHMOND, IND.

Gooch Peerless and Giant Freezers.

Increase of Sales Nine Hundred Per Cent. since 1879.

These Freezers have grown into such popularity that they are universally acknowledged by the trade to be without an equal, and are kept in stock by most of the leading dealers in every State of the Union.

We scarcely ever lose a customer who tries our goods, and all we ask is an order for a sample, and we will send you the best and handsomest Freezer you ever saw.

SEND FOR SAMPLE.

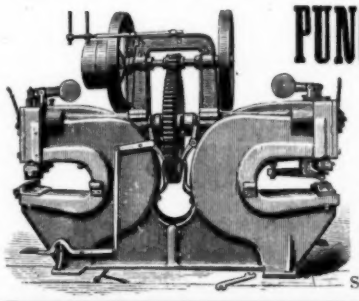
MANUFACTURED BY

THE GOOCH FREEZER COMPANY,

CINCINNATI.

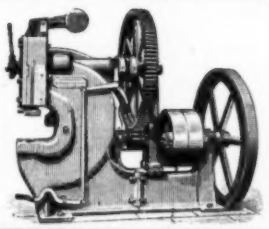
THE LONG & ALLSTATTER CO., Hamilton, Ohio.

PUNCHES, SHEARS & HAMMERS,



DOUBLE.
SINGLE.
HORIZONTAL.
TWIN BOILER.
SPACING GATE.
MULTIPLE ANGLE.
BAR, &C.
BELT AND STEAM DRIVEN.

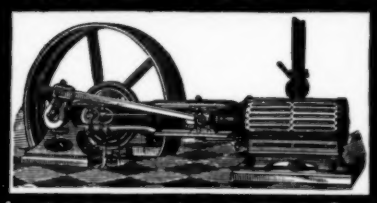
Send for Catalogue.



THE CUMMER ENGINE CO.

CLEVELAND OHIO

SEND FOR 150 PAGE ILLS CATALOGUE.



AUTOMATIC

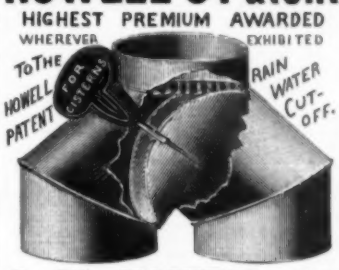
Awarded highest premiums at Cincinnati and Louisville Expositions of 1883, for "Best Automatic Engine." We will furnish anyone copies of the ORIGINAL ENTRIES of several engine builders who claim they were not competing with us. They all entered in the same class with us, and now by deceptive Circulars (one headed "Fact versus Falsehood,") attempt to mislead.

☞ No premiums were offered for Condensing Engines.

W. J. CHAPMAN, Direct Shipper of **COAL AND Connellsville Coke.** Special attention given to orders from founders and machinists. **Office, York and William Sts.**

HOWELL'S Patent RAIN WATER CUT-OFF

HIGHEST PREMIUM AWARDED WHEREVER EXHIBITED



RECOMMENDED BY ARCHITECTS, BUILDERS USERS, EVERYWHERE.

For turning water into or off from the cistern. The handle, which is an iron weight, insures the bucket remaining where placed and entirely prevents its being turned by the downflow of water. The bucket or valve passes behind the rim at the top and overlaps at the bottom, thus securing perfect water joints at both connections. We manufacture all sizes from 2½ to 24 inches; 2½ inch, $5; 3 inch, $6; 3½ inch, $8; 4 inch, $9; 5 inch, $14; 6 inch, made of IX Tin, $20. These sizes are always in stock.

Packed in crates of one dozen each size up to 5 inch; 5 and 6 inch in crates of ½ dozen each; f. o. b.; no charge for crates. For sale by dealers all over the United States.

G. W. HOWELL, Manufacturer, COVINGTON, KY.

Standard Smelting and Refining Works,

METALS,

BABBIT METALS.
TINNERS' SOLDER
PLUMBERS' SOLDER.
COPPERSMITHS' SOLDER.
ELECTROTYPE METAL.
STEREOTYPE METAL.
INGOT BRASS.

162, 164, and 166 Water Street,

CINCINNATI, O.

INGOT COPPER.
PIG TIN.
ANTIMONY.
PIG LEAD.
SPELTER.
BAR LEAD.
BAR TIN.

Genuine Babbit Electrotype and Stereotype Metals a Specialty. Daily quotations furnished upon application. Prices lower than any Eastern or Western market.

A First-Class Automatic Cut-Off Engine,

EXTREMELY SIMPLE TO HANDLE AND CONTROL.

Can be produced cheaply, and an ordinary Slide Valve Engine can be converted into the best Automatic Cut-Off Engine at a trifling expense. **A Saving of 33⅓ Per Cent. in Fuel** guaranteed by adopting the **Topmiller Automatic Valve Gear.** To manufacturers of Engines we offer State and County rights for sale on reasonable terms. Send for illustrated circular.

S. OBERMAYER & CO.

Patentees and Proprietors, Evans Street, South of 8th, Cincinnati, O.

H. J. McKEOWN,

MACHINIST AND MILLWRIGHT.

Shafting, Hangers and Pulleys, Engineers' Supplies, Packing, Sheet Gum, Pipe, Fittings, and Brass Goods. Special attention given to fitting out shoe and other factories, and to the repair of Gas Engines. Has now on hand five Wais' Patent Power Combined Splitting and Squaring Shears, which are new, and may be had on reasonable terms. Also dealer in New and Second Hand Machinery of all kinds. Write for Catalogues.

196 E. FRONT STREET, CINCINNATI, OHIO.

SCALE IN BOILERS!

The DANGER and REMEDY!

Steam Users should realize the **Danger and Extravagant Waste of Fuel** resulting from Scale in Steam Boilers. We offer you a perfect **Remedy** in our **Boiler Powder,** which is absolutely harmless to Boilers or Connections. For particulars address,

OHIO SCALE SOLVENT CO.,

C. W. WITHENBURY, Secretary, Room 27 Glenn Building. Cincinnati, Ohio.

C. H. & D. R. R.

Cincinnati, Hamilton and Dayton Railroad.

From and to CINCINNATI.

TOLEDO, SAGINAW, NIAGARA FALLS, **DETROIT,** TORONTO, AND ALL POINTS IN MICHIGAN AND CANADA.

CONNERSVILLE, RUSHVILLE, BLOOMINGTON, **INDIANAPOLIS.** PEORIA, AND ALL POINTS WEST OR NORTHWEST.

RICHMOND, LOGANSPORT, DELPHI, **CHICAGO,** MONON, AND ALL POINTS IN THE NORTHWEST.

FORT WAYNE, KALAMAZOO, PETOSKEY, **GRAND RAPIDS,** MACKINAW, AND ALL POINTS IN MICHIGAN.

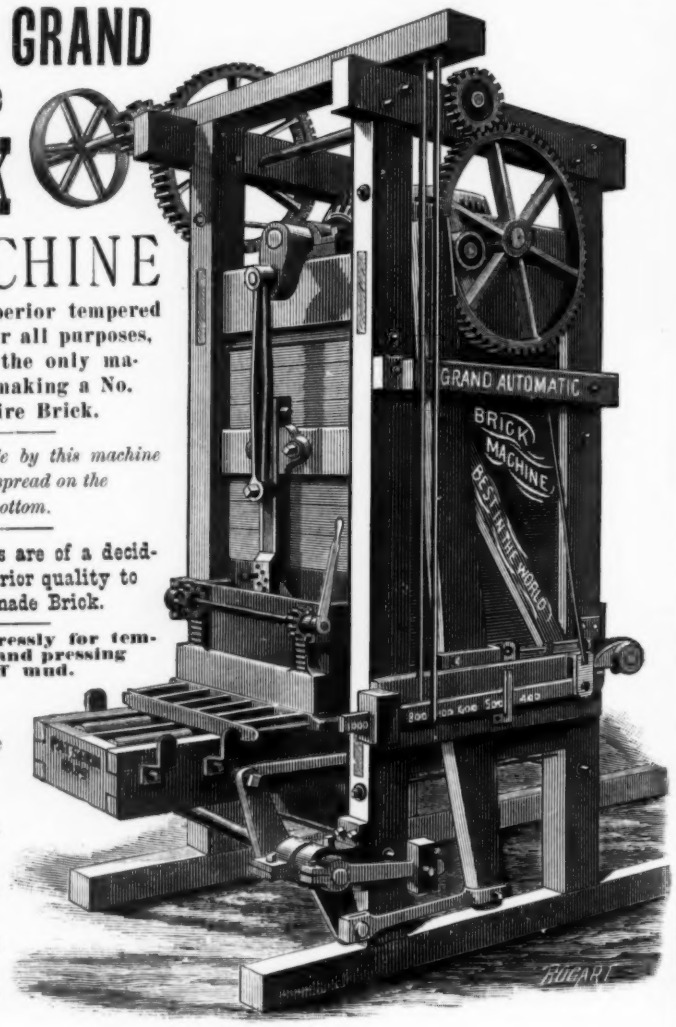
PULLMAN PALACE SLEEPERS AND PARLOR CARS.

For information apply at any Railroad Office in the United States or Canada. In Cincinnati, Ohio, at Offices: N. W. Corner Fifth and Vine Streets, or Depot, Fifth and Hoadly Streets, or address

J. F. McCARTHY, JNO. R. McCORD, } Agents at 5th and Vine Sts., Cincinnati, O.

SAM'L STEVENSON, General Ticket Agent.

THE GRAND Automatic BricK MACHINE



Makes superior tempered Brick for all purposes, and is the only machine making a No. 1 Fire Brick.

Bricks made by this machine do not spread on the bottom.

Its products are of a decidedly superior quality to hand-made Brick.

Built expressly for tempering and pressing stiff mud.

Every machine guaranteed.

Correspondence Solicited.

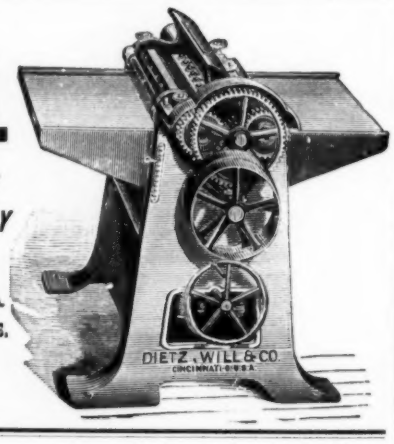
Send for descriptive catalogue, containing valuable information to

JONATHAN CREAGER,

131 E. Front Street, - Cincinnati, O.

DIETZ, WILL & CO.

Wood-Working Machinery.



BAND SAWS, UNIVERSAL SAW BENCH, SAW MANDRELS, PONY PLANERS, MATCHERS.

Shafting, Pulleys and Hangers, Wood Turning and Pattern Makers' Lathes.

186 to 191 PEARL STREET,
Cincinnati, O.

CHATTANOOGA PAINT CO.

Chattanooga, TENN. S. B. LOWE, MANAGER.

MANUFACTURERS OF THE

Best Iron Paint in the Market,

Both Dry and Ready-Mixed, for the Protection of Iron, Tin or Shingle Roofs, Out-buildings, Railroad Cars, Iron or Wooden Bridges, Gas Receivers, and machinery of all kinds, Iron Stacks and all property exposed to the weather. Our dry is furnished in barrel, ton or car-load lots, and our ready-mixed in one and two-gallon cans, half-barrels and barrels. ☞Merchants buying 50 gallons or over in cans can have their special label put on if desired. WE GUARANTEE OUR DRY AND READY-MIXED PAINT EQUAL TO ANY IN THE MARKET. ☞For prices, address

CHATTANOOGA PAINT CO., Chattanooga, Tenn.

LAWRENCE ✣ MENDENHALL,

Manufacturers' Agent,

Office, No. 55 West Fourth Street,

CINCINNATI, O.

Hardware & Building Specialties

INTRODUCED AND SOLD.

—AGENT FOR—

Hugunin Window Balance,
Hemacite Knobs,
North's Blind Awning Fixtures,
Wilber's Barn Door Hangers,
Raymond's Lead Weights,
Dudley Blind & Shutter Worker.

✣ IRON ✣

ROOFING

SIDING, CEILING, ARCHES AND LATH.

⊙CINCINNATI⊙ CORRUGATING CO.

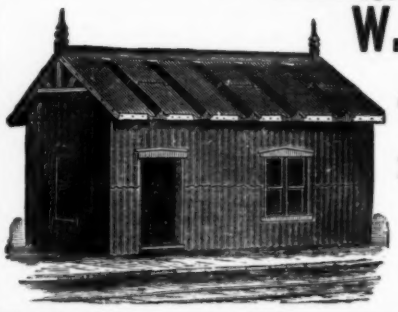
✣ CINCINNATI, O. ✣

SEND FOR ILLUSTRATED CATALOGUE.

METALLIC SHINGLES.

IRON ROOFING AND SIDING

—Crimped and Corrugated—



W. G. HYNDMAN & Co.

52 & 54 East Second Street,
CINCINNATI, O.

—FOR—

DWELLINGS, STORES, SAW MILLS, BARNS, FACTORIES, SHEDS, Etc., Etc., Etc.

Send for Circulars and Prices.
Mention this paper.

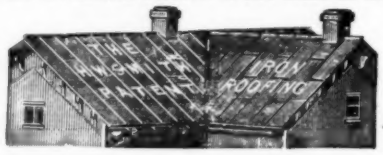
T. C. SNYDER & CO.

—MANUFACTURERS OF—

IRON ROOFING, SIDING AND CEILING,

(The H. W. Smith Patent is the Best in use.) AND JOBBERS IN

PLAIN,
Corrugated,
CRIMPED,
BEADED.



IRON ORE,
PAINT,
CEMENT,
And Roofers' and Builders' Papers.

—PATENT CALAMINED IRON IN QUANTITIES---A New Thing.—

Coating is indestructible, will not scale, is soft, solders more strongly and is superior to Galvanized Iron or Tin for all purposes. Protected both in body and surface. ☞Circulars, Price-List and Sample mailed at request.

—CANTON, OHIO.—

METALLIC SHINGLES.

$5.50 per square | ANGLO-AMERICAN ROOFING CO. 22 Cliff Street, New York

---

JOHN MERRY & CO.

WEST ✣ SIDE ✣ GALVANIZING ✣ WORKS,

535 to 547 West 15th Street, New York,

—MANUFACTURER OF—

The "LION" and "PHŒNIX" Brands of Galvanized Sheet Iron.

Corrugated Iron for Roofing or Siding, Tin Plates, Solder, Slating and Roofing Nails, Tinned Galvanized and Black. All kinds of Iron work Galvanized or Tinned to order.

THE CONE PRESS.

We desire to call the attention of Factories, Farmers and Planters, and all others in need of a superior machine to our hand power Cone Press, which for power, speed, strength, durability, economy, &c., &c., surpasses all other Hand Presses used for baling Cotton, Rags, Hay, Broom Corn, Tobacco, &c. It does not require skilled labor to work the Press, but two ordinary farm or other laborers of average intelligence can pack from 50 to 60 bales of Hay per day, each bale averaging from 200 to 250 pounds, or from 750 to 1,000 pounds of rags. Address with orders or for circulars,

THE CONE PRESS CO.
34 N. Holliday St.
BALTIMORE, MD.

TRADE NOTES.

A St. Louis Hotel.

Business men going to the "Future Great" will find the St. James a good hotel and a centrally located one. It is located on the corner of 5th and Walnut streets, near the principal theatres, exchanges, railroad offices, and a few minutes walk will bring you into the wholesale district. It is patronized largely by business men visiting St. Louis, and is known as "the business man's house of the city." Thos. G. Miller, the proprietor, is a genial host, a very clever gentleman, and is, deservedly, popular. The clerks are affable, polite and attentive to all the guests of the house. Mr. Sheringer, chief clerk, is an hotel man and his friends are legion. Ed. Adams, second clerk, also has hosts of friends. Business men contemplating a visit to St. Louis should have their baggage checked and their mail sent to the St. James, for they may find within its walls some of the very men they wish to see. Rates $2.00 and $2.50 per day, according to location of rooms.

BALTIMORE.

THE H. A. Ramsay Engineering Works, Locust Point, report their business as very active at present. They are building a new boiler for the light-house steamer Nettle, one for custom-house boat Discover, and one for the fish steamer George A. Bradley, besides repairing several tug-boats and bay steamers. They are also putting up some improved brick machinery, and have finished a large kettle 8 feet diameter and 11 feet high for Messrs. Armstrong & Co.'s soap works, and have completed the handsome bridge for Biddle street extended.

MR. WM. C. CODD, Nos. 306 and 308 Aliceanna street, reports orders coming in very freely for Medart patent pulleys and for his other specialties, Naylor's patent feed lubricator, &c.

THE business of the Ewart Chain Belting is constantly on the increase, orders being received for large quantities of this chain. Where once used it is said to be without an equal. A large number of factories, mills, &c., which have lately been built are adopting this means of transmission of power and all report that they are well pleased with its work.

MESSRS. E. J. CODD & Co., machinists, have a liberal amount of small work and repairs on hand and they are encouraged as to the future prospects for business. They manufacture some specialties for which there is always a demand.

MR. JOHN B. ADT is building two tobacco machines for firms in North Carolina and two elevators or hoisting machines for firms in the South, and two for firms in this city.

Important to Southerners.

Persons arriving in New York via Cortlandt Street Ferry, by taking the 6th Avenue Elevated Train, corner Church and Cortlandt streets, can reach the Grand Union Hotel in 42d street, opposite Grand Central Depot, in twenty minutes, and save $3 carriage hire. If en route to Saratoga or other summer resorts via Grand Central Depot, all baggage will be transferred from hotel to this depot free. 600 elegantly furnished rooms $1 and upwards per day. Restaurant the best and cheapest in the city. Families can live better for less money at this hotel than at any other first-class hotel in the city. ‡

Send to FARMVILLE MANF'G CO.

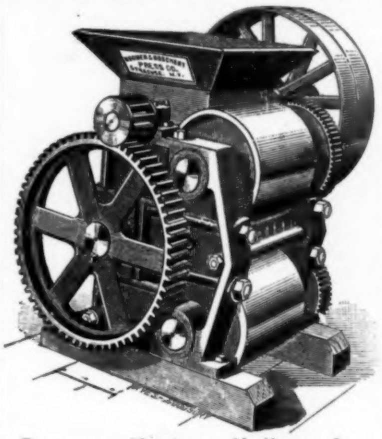
FOR PRICE-LIST OF

PLOW HANDLES,

Beams and Rounds,

FARMVILLE, - VA.

CRUSHERS.



Pressers, Heaters, Hullers, &c.

For Small or Medium-size

COTTON-SEED OIL MILLS.

Can furnish estimates for a complete mill or any part thereof. Also BALING PRESSES for Cotton, Woolen or Paper factories.

Lard, Tallow Oleo and **Paraffine** Presses.

☞ Correspondence Solicited.

Boomer & Boschert Press Co., Syracuse, N. Y

Or 219 Fulton St., New York City.

SHEET IRON

ROOFING.

Northrop's Patent Cap Seam Iron Roofing.

No rivets, screws or nails through the sheets. Easily applied and perfectly watertight.

CRIMPED IRONS

of various styles for Roofing and Siding.

IRON CEILING.

ORNAMENTAL. DURABLE. FIRE-PROOF.

A. NORTHROP & CO

97 First Avenue,

PITTSBURGH, PA.

Derby Roll Top Desks.

—Best Office Desk in the World.—

Cherry, Walnut, Oak, Ash and Mahogany.

☞ Send for Illustrated Catalogue.

DERBY & KILMER DESK CO.

55 Charlestown St., Boston, Mass.

Established 1793.

H. BALDERSTON & SON,

MANUFACTURERS OF

WIRE GRATING FOR WINDOWS

Doors and Office Railing, Wire Screens for Banks, Churches and Store-Fronts. Woven Wire, Wire Tree-Guards, Sieves, Screens for Coal, Sand, &c.

66 S. Calvert Street, Baltimore.

WIRE RAILING

and Ornamental Wire Works.

DUFUR & CO. 36 N. Howard St., Baltimore.

Wire Railing for Cemeteries, Lawns, Gardens, Offices and Balconies; Window Guards, Tree Guards, Wire Cloth, Sieves, Fenders, Cages, Sand and Coal Screens, Iron Bedsteads, Chairs, &c.

Business Chances.

☞ For the purpose of making the MANUFACTURERS' RECORD a still more valuable medium of communication between its readers North and South, we will publish, FREE OF CHARGE, short advertisements, not exceeding 40 words, from those in the South who have mills, factories, manufacturing sites or water-power for sale, capital wanted for industrial enterprises, &c., &c.; while readers in other sections who desire to engage in manufactures at the South are also invited to use these colums, without cost, either in seeking information regarding the advantages and special claims of different localities, or for asking about good openings for men and money. This department is also free for Southern manufacturers who wish to advertise for mill managers superintendents, engineers, &c.

In corresponding with any of these advertisers please mention the Baltimore Manufacturers' Record.

A GOOD LOCATION for light manufacturing purposes, such as brooms, buckets, chairs, &c., on the N. & W. R. R., Southwest Virginia. One acre of land with water, office, 5 ton wagon scales, and private siding to hold 10 or 12 cars. Will sell at a moderate price or put it in as stock. Address Dixie, care of MANUFACTURERS' RECORD.

AN ACTIVE, reliable engineer wants to engage in some business, where his time and $500 would be suitably remunerated. Address G. W., care MANUFACTURERS' RECORD.

WATER POWER.—We have on our place in Marion, Va., one of the finest water powers and situation for factory in Southwest Virginia, immediately on the N. & W. Road, within half mile of the depot, which we will sell cheap to any one who will put a factory on it or will put it in as stock with responsible parties. Look & Lincoln.

COTTON MANUFACTURING.—I desire to join parties in manufacturing any or all of following textiles: Turkish and other towels, quilts, tidies, table covers, mosquito netting, etc. A splendid opportunity for introducing a substantial industry into the South. Communications requested. John Campbell Brooks, Paterson, New Jersey.

AN ENGINEER and draughtsman wants a position, where his experience in managing men, designing and constructing machinery of various kinds, can be given a trial with prospects of investing some means. Engineer, 547 Lafayette ave., Brooklyn, N. Y.

CAPITAL FURNISHED and contracts taken for building ice factories and cold storage houses in any Southern State. Parties wishing to engage in this business address The National Investment and Development Co., 83 Cedar Street, New York.

WANTED.—A practical bucket maker with $500 to $1,000, to invest so as to have some interest in the business, to turn out buckets, etc., by contract. Address, H. N. S., Jr., Knoxville, Tennessee. P. O. box 130.

WANTED TO PURCHASE.—One or more latest improved machines for finishing cotton fish line. Also machine for hanking and coiling same. Address A. P., care MANUFACTURERS' RECORD, Baltimore, Md.

I WOULD LIKE to get estimates on steam-wheel boat machinery complete, from good manufacturers. Size of engines from 6 to 10 inch cylinder. C. N. Ledwith, Apalachicola, Florida.

WANTED.—Woolen mill machinery and flouring mill machinery. Want to exchange valuable residence property for them. One set cards and jack and custom card, &c., and mill machinery to grind for *custom* 300 bushels wheat and same of corn in 10 hours, with cleaning, smutting, purifying and batting attachments. All must be latest improved, and new or good as new, and reasonable price. Address M, Box 10, Pulaski, Tenn.

WANTED.—A partner with $5,000 or $6,000 capital to join me in a custom mill to card wool and grind wheat, corn and feed, and run a country barter store. My capital will consist in property adapted to such uses, and will be put in at a low valuation. Address L. M., Box 10, Pulaski, Tenn.

WANTED TO PURCHASE.—A set of 40-inch wool cards, a 240-spindle self-operator and picker.—Must be second hand, good as new and very cheap. Address L. M., Box 10, Pulaski, Tenn.

WOOLEN MANUFACTURERS.—The undersigned desires to take the entire management of some good woolen mill in the Southern States, (has had 30 year's practical experience,) or would take charge of the finishing department alone. Address P. M. Smith, Auburn, Mass.

MAN WANTED to take a half interest in merchant mill and saw mill. A rare chance for a man with a small capital. Apply to S. Worthen, Bakersville, Mitchell county, N. C.

A FIRST CLASS machinist and engineer of many year's experience in erecting and running all kinds of machinery, is open for engagement to go South. Address Engineer, care of MANUFACTURES' RECORD, Baltimore, Md.

FOR SALE CHEAP.—The entire property of the Danner Land & Lumber Co., consisting of, in part, 3 steam saw mills and about 30,000 acres of pine timbered land. Will sell on easy terms, and will take pay in lumber, if desired, and parties are responsible. For particulars, address J. C. Strong, assignee, Mobile, Ala.

FORTY-THOUSAND dollar cotton mill for sale in South Carolina, for division, containing 560 acres of land, merchant grist and saw mills and gin,—all in good running order. For health and natural advantages not excelled in the South. Address W. L. Morgan, Bros. & Co., Crawfordville, Spartanburg Co., S. C.

FOR TEN THOUSAND DOLLARS will sell a fine water power, with two hundred acres of land in Piedmont Belt, Spartanburg Co., S. C. Health and water unsurpassed in the State. For manufacturing purposes will employ two hundred thousand capital; 150 acres in cultivation. Address S. A. Green, Crawfordville, P. O., Spartanburg Co., S. C.

FOR SALE.—1,200 acres of land, fine water-power, on Horse Creek, near Bath Paper Mill, on C. C. A. R. R., 5 miles from Augusta, Ga. Saw mill, grist mill and gin; crystal water never fails in dry time; well improved;—all in good order. (Fine place for paper mill.) For particulars, address W. H. Dowdy, Bath, S. C.

WANTED.—A man with a printing office can secure a good locality, (no paper in three counties in a population of 40,000) in a very healthy village. Railroad located and will be built to the town. Some inducements offered to the right man. Apply to S. Worthen, Bakersville, N. C.

WANTED.—A water-power in some Southern State, and men with some capital, to engage with a man of 15 years' experience and some capital in manufacture of sewing machines. A village prefered. Address, W. S., MANUFACTURERS' RECORD, Baltimore, Md.

WANTED—$2,000 or $3,000 to rebuild after the losses by our fire last fall. Abundant security on real estate Good interest and semi-annual payments if desired. Apply to A. H. V. D., Box 89, Liberty, Virginia.

THE ADVERTISER desires to furnish a part of the capital, and join others in starting an oil mill and an ice factory in some good locality in the South.—Address Columbus, care MANUFACTURERS' RECORD.

FOR SALE LOW.—One-third of the capital stock of $20,000 in the Tuskaloosa Foundry and Manufacturing Co., who carry on a planing mill, boiler and machine shop and cotton ginning business in one of the best localities in the South. Company free from debt. Reasons for selling: owner must devote his attention to other interests at a distance. A position worth $1,200 a year awaiting purchaser who understands the planing mill business. Correspondence solicited. R. S. Brodhead, Florence Hotel, Birmingham, Ala.

WANTED TO PURCHASE.—One set good second hand 40 inch woolen cards, one 240 or 280 spindle jack, one picker about 50 ft. 2 in. shafting, with pulleys &c., 8 or 10 M 7-inch filling bobbins. Any one having the above will do well to address J. B. T., Olympia, Smyth county, Virginia.

Horizontal Engine,

Cylinder 20½x42, shaft 8 inches diameter, heavy fly wheel: has just been put in thorough order. Price very low.

THOMAS WOOD & CO.

22d & Wood Sts., - PHILADELPHIA.

PATENTS PROCURED.

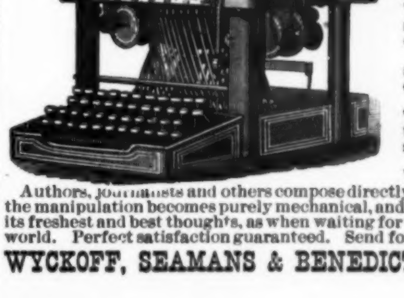
REJECTED APPLICATIONS AMENDED & PROSECUTED. INVENTORS DRAWINGS MADE.

NO MODEL REQUIRED | HURDLE & STEIGER TRIBUNE BLDNG. N.Y.

UPRIGHT DRILLS CUT-OFF TOOLS TAP-DRILL GAUGES

REMINGTON STANDARD TYPE-WRITER

THE STANDARD WRITING MACHINE OF THE WORLD.



It much more than takes the place of the pen, as it does the work of two or three penmen, and much more neatly and legibly. The business man will appreciate this saving of valuable time. Dictate your correspondence etc., to a Type-Writer operator and have your time and strength for other matters. (Perfect press copies obtained in same way as of pen writing.)

Again the Type-Writer is well-nigh indispensable to overworked professional men. It is a complete relief from the strain of pen-writing.

Lawyers have their papers written with the Type-Writer. Many copies can be made at one time, (absolute duplicates) thus multiplying speed.

Clergymen write their sermons with the Type-Writer, and hence can read them in a dim light

Authors, journalists and others compose directly on the machine. It facilitates composition, as the manipulation becomes purely mechanical, and owing to its greater speed the mind does not lose its freshest and best thoughts, as when waiting for the slow pen to catch up. In use throughout the world. Perfect satisfaction guaranteed. Send for illustrated pamphlet, with testimonials.

WYCKOFF, SEAMANS & BENEDICT, 281 & 283 Broadway, New York.

Valuable Florida Property For Sale.

MUST BE SOLD FOR DIVISION.

A Fine Orange Grove.

The most desirable piece of property on Indian River, in South Florida, is now offered for sale, in order to bring about a division, one of the owners having died. The locality is famous for producing the best, the largest, and most delicious sweet oranges, pineapples and other tropical fruits, as well as the most succulent vegetables of all kinds in the State. The property contains over 400 acres of the most fertile and productive lands to be found in tropical Florida or elsewhere.

There are about twenty-five acres set in orange trees, which are now in full bearing. The tract is about equally divided by a creek, which affords an abundance of fresh water. Ducks, geese, and game of all sorts, as well as fish exist in inexhaustible numbers. Near the mouth of the creek, in Indian River, are immense beds of the finest and largest, as well as best flavored oysters in the United States. This tract fronts nearly one mile on Indian River, the banks being very high and gradually sloping back from the river, affording the best protection from the winds from off the Atlantic ocean, which are not very frequent in that latitude. The river at this point is two and a half miles wide. From the top of a very high mound in the grove the ocean can be seen. Connected with this grove is a nursery of about ten thousand seedling orange trees, from two to three years old, in a healthy and thrifty condition. These trees sell readily for $1.25 each.

On the south side of the creek, which is two hundred yards wide, where it empties into Indian river, are about two hundred acres of the finest pineapple land in Florida. The entire tract can be easily divided up into smaller farms if a company should purchase for that purpose. The locality is entirely free from malarial diseases, and is withoutdoubt the most attractive section of Florida.

ONE of the BEST ORANGE GROVES in SOUTH FLORIDA.

This property is situated on the famous Lake Jessup, ten miles from Sanford, and one and a half from Salary's Wharf, and consists of 16 acres of pine land on which there is a five-acre grove, just coming into bearing. The improvements—A new framed dwelling house, with brick chimneys, kitchen and all necessary out-houses. Are all new. This is the home place. In a half mile of the dwelling, and nearer the wharf, is the main grove, now in full bearing, which consists of 30 acres of first-class hummock land, with about twenty acres set in the grove, which is in a high state of cultivation. The trees were set in 1868—sixteen years ago. The present crop of oranges was sold at the grove, the purchaser gathering them, at $2.00 per box, and it is estimated at about 2,000 boxes. It is reasonable to suppose that the crop for the present year will be double that of the past year, as the grove has doubled its bearing for several successive years, and by actual observation it has been demonstrated that orange trees continue to increase their bearing up to 40 or even 50 years when well and properly cultivated. In addition, if desired, can be bought with the above described property, 35 acres of very rich black hummock, in half a mile of Salary's Wharf, which is high and dry. These properties can be bought at a very low figure, less than half their present real value.

TWO SPLENDID ORANGE GROVES NEARLY JOINING EACH OTHER,

At City Point—Near Rockledge on Indian River, at Exceeding Low Fgures.

One grove is in a square of ten acres immediately on the river front, with a strip of land running back, six acres long by one acre, and eighteen feet wide, containing over 17 acres, on which there is a grove in bearing of 1½ acres, and 10 acres set in a young grove, that will soon come into bearing. This grove is near the river bank.

The other tract contains 46 acres, and has a river frontage of one acre wide, running back, eight acres long, to where there is an excellent grove of 17 acres, that will soon come into bearing, with one and a half acres in full bearing; and on the river front, 40 well-developed trees, in full bearing.

The whole of these tracts is of the most excellent quality of hummock lands, and is well adapted to the growing of every kind of tropical fruits and vegetables. Good society. Healthfulness unexcelled by any other section of the country. One or both tracts will be sold. ☞ FOR PARTICULARS, ADDRESS

BIGSBY & EDMONDS, Baltimore.

TAKE THE

OHIO & MISSISSIPPI

Railway

BETWEEN

CINCINNATI, LOUISVILLE and ST. LOUIS.

4 Solid Daily Trains (each way) between CINCINNATI and ST. LOUIS.

3 Solid Daily Trains (each way) between CINCINNATI and LOUISVILLE.

2 Solid Daily Trains (each way) between ST. LOUIS and LOUISVILLE.

No change of Cars for any Class of Passengers! First-Class, Second Class and Emigrant Passengers all carried on Fast Express Trains, consisting of Palace Sleeping Cars, elegant Parlor Coaches and comfortable Day Coaches, all running THROUGH WITHOUT CHANGE.

Only Ten hours time between CINCINNATI and ST. LOUIS, or ST. LOUIS and LOUISVILLE.

Four hours between CINCINNATI and LOUISVILLE.

The O. & M.

ALWAYS MAKES

FAST TIME AND SURE CONNECTIONS

With All Lines at CINCINNATI, LOUISVILLE and ST. LOUIS, and is the only line between

ST. LOUIS and CINCINNATI

AND ST. LOUIS AND LOUISVILLE,

Under one management, running all its trains through "SOLID," and in consequence is the recognized FIRST-CLASS ROUTE BETWEEN THOSE CITIES.

☞ **Ask for Tickets via O. & M. R'y.** ☜

For sale by agents of connecting lines East, West, North and South.

W. W. PEABODY, Prest. & Gen'l Manager, CINCINNATI, OHIO.

W. B. SHATTUC, General Pas. Agent, CINCINNATI, OHIO.

J. H. RATTERMANN, President. FRED BUSSE, Sec'y & Treas'r. F. G. DUERR, Vice President.

THE U. S. VARNISH CO.

CINCINNATI, - - - OHIO.

258 and 260 Colerain Avenue.

LARGEST VARNISH FACTORY in the WEST.

CHICAGO BRANCH, 47 STATE STREET.

☞ Mention this paper.

W. L. MERSFELDER. MORGAN L. SMITH.

CINCINNATI PATTERN WORKS.

Stove Patterns a Specialty.

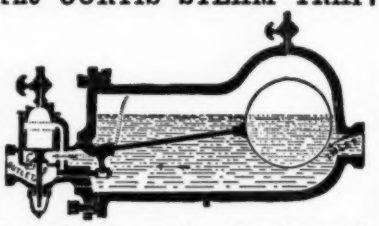
Artistic, Architectural and Machine Patterns

Of Every Description Made on Short Notice.

N. W. COR. FRONT & PIKE STS.

Jobbing Promptly Done. **CINCINNATI, O.**

The CURTIS STEAM TRAP.



Has *main* valve outside. *Air* valve inside.

MANUFACTURED BY

Curtis Regulator Co., 158 Beverly St., Boston.

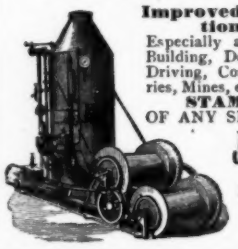
—GENERAL AGENCIES:—

109 Liberty St., New York; No. **19** N. 7th St., Philadelphia; **86** and **88** Market St., Chicago; No. **49** Holliday St., Baltimore; No. **707** Market St., St. Louis; No. **745** Craig, Montreal.

NELSON CURTIS, Agent.

Hoisting Engines

Of any Power, Double and Single, with



Improved Patent Friction Drums,

Especially adapted for Bridge Building, Dock Building, Pile Driving, Coal Hoisting, Quarries, Mines, etc.

STAMP MILLS

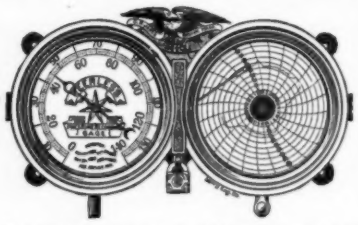
OF ANY SIZE FOR MINES.

J. S. MUNDY

22 & 24 Prospect St.

Newark, N. J.

RECORDING PRESSURE GAGE.



It shows the pressure and all its variations: showing the time of each and every change of pressure. Will send one on trial. WRITE FOR CIRCULAR.

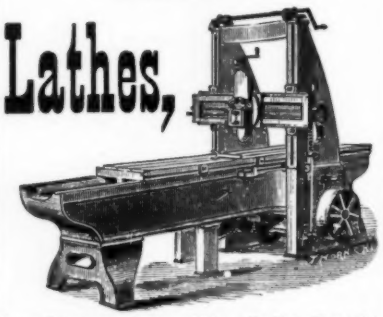
S. P. JONES, 28 SCHOOL STREET, BOSTON, MASS.

Established 1867.

E. HARRINGTON, SON & CO.

MANUFACTURERS OF

Lathes,



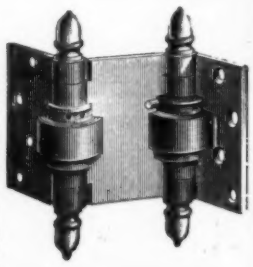
Iron Planers, Boring Mills, Radial, Upright, Suspension Multiple, Level, Carriage Makers,' Blacksmiths' Hand and Powers Post Drills, and a variety of other Machinists' Tools. PATENT DOUBLE CHAIN SCREW PULLEY BLOCKS, unrivalled for durability, safety and power.

PATENT DOUBLE CHAIN QUICK-LIFT HOISTS, with brake for quick and easy lowering. Circulars furnished.

Works and Office, North 15th St. and Penn Avenue,

PHILADELPHIA, PA.

UNION SPRING HINGES are **Simple, Easily Set.** Cannot be put on wrong. They work either way, right or left. All sizes. Single or double acting. For Wire Screens and Light Doors they have no equal. Send for Price List. M. W. ROBINSON, Sole Agent, 9 Chambers St., New York.



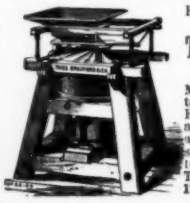
AULT & WIBORG PRINTING INKS.

CINCINNATI.

A&W INK USED ON THIS PUBLICATION

TAYLOR MFG. CO., Chambersburg Pa

JACKSON & TYLER, Agents, Baltimore



Established 1840. Incorporated 1884.

The Thom's Bradford Co.,

Successors to THOMAS BRADFORD & CO.

Manufacturers of the celebrated Bradford's Portable Under Runner Mills, for corn, wheat and middlings. First premium at Cincinnati Industrial Exposition, 1884. Send for illustrated catalogue. Address plainly THE THOMAS BRADFORD CO., 174, 176 & 178 W. Second St., Cin., O.

Sherman Mfg. Co.

JACKSON, TENN.

Manufacturers of the Lovrien Cube Pipe Tongs. Patented 1880 and 1881. The best and cheapest pipe tongs in the world. One pair has a wearing capacity equal to twelve pair of any other tongs. Requires but one-half the number of tongs to do the same work that is required by any other tongs. Every pair warranted. We are the only authorized manufacturers of these tongs in the U. S. We also manufacture Engines, Boilers, Saw Mills, and Saw Mill Machinery, Pulleys, Shafting, Hangers, &c. Correspondence respectfully solicited.

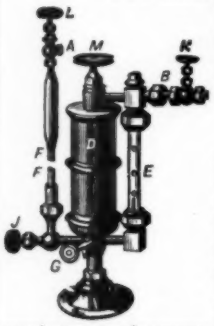
Scribner's Lumber and Log Book.

OVER ONE MILLION SOLD. Most complete book of its kind ever published. Gives measurement of all kinds of Lumber, Logs, Planks, Scantling; cubical contents of square and round Timber; hints to lumber dealers; wood measure; speed of circular saws; care of saws; cord-wood tables; felling trees; growth of trees; land measure; wages, rent, board, interest, stave and heading bolts, etc. Standard book throughout the United States and Canada. New illustrated edition 1882. Ask your bookseller for it. Sent post-paid for 35 cents.

G. W. FISHER, Box 238, Rochester, N. Y.

The Seibert Cylinder Oil-Cup Co.

SOLE MANUFACTURERS OF



Oil Cups for Locomotives, Marine and Stationary Engine Cylinders, and the Seibert and Gates Patents, with Sight Feed.

Take Notice.

The "Sight Feed" is owned exclusively by this company. See Judge Lowell's decision in the United States Circuit Court, District of Massachusetts, Feb. 23d, 1882.—All parties are hereby notified to desist the use, manufacture or sale of INFRINGING CUPS, as we shall vigorously pursue and prosecute all infringers.

THE SEIBERT CYLINDER OIL-CUP CO.

53 Oliver St., Boston, Mass.

ENGRAVING DIRECT FROM PHOTOGRAPH.

NO DRAWING REQUIRED.

NO HAND WORK NECESSARY.

SEND FOR PARTICULARS { CHEAP, ARTISTIC. CROSSCUP & WEST ENG. CO. 702 CHESTNUT ST. PHILA. PA.

THE BRADSTREET

Mercantile Agency

HAS NOW BEEN

Under its present successful management for the past seven years,

And during that time its business has more than trebled, while its facilities have proportionately increased.

No expense is considered too great in obtaining and applying to the conduct of the business all possible improvements. With its present system for obtaining and promulgating information, this Agency is justly regarded by its patrons as authority on all matters affecting commercial credit. Its ramifications are greater and its business larger than any similar organization in the world conducted in one interest and under one management.

You are respectfully invited to investigate, and if in need of an Agency, to test its ability to serve you.

CHAS. F. CLARK, President.

Baltimore Office,—American Building,

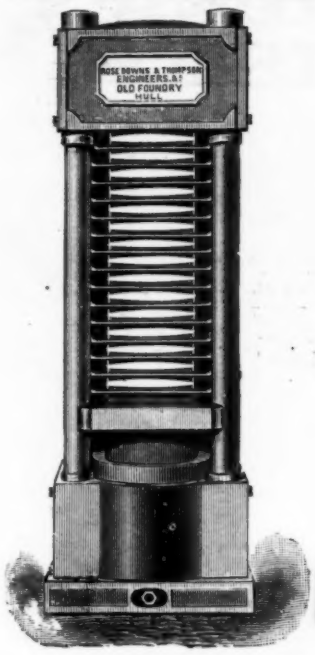
H. KERSHAW, Supt.

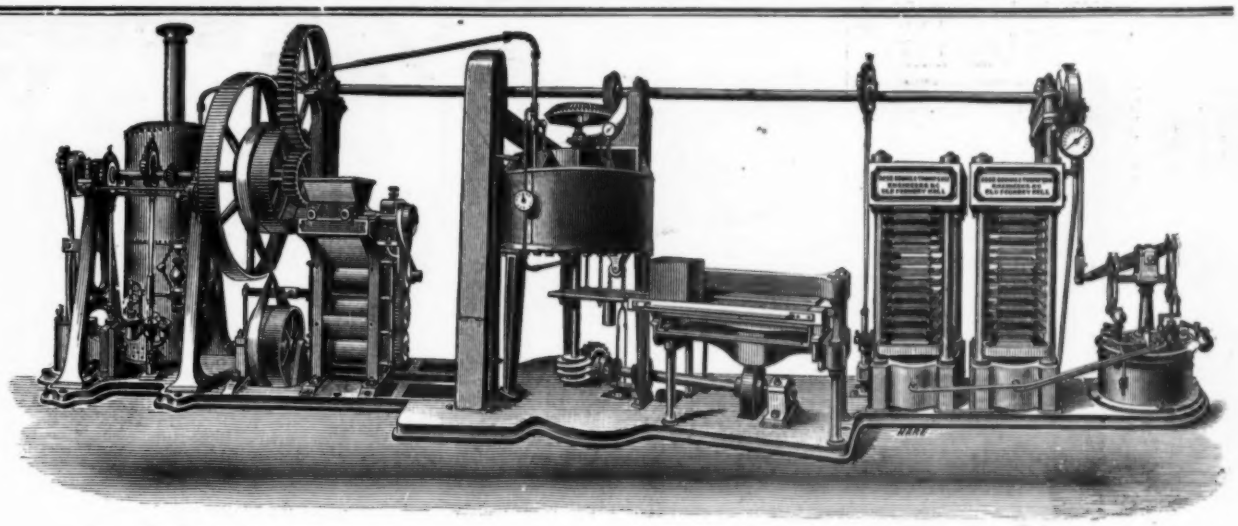
TAPS & DIES · VISES · TWIST DRILLS · CHUCKS · MACHINE SCREWS · LATHES · FILES · STEEL TOOL STUBS

TOOLS for Machinists, Amateurs, Jewellers, Model Makers, Blacksmiths, Carpenters, Coachmakers, etc.

Send 20 cts. for **new** *Metal Worker's Catalogue, 300 Pages. Wood Worker's Catalogue free.*

FALLMAN & McFADDEN, Philadelphia, Pa.





REVOLUTION IN

Cotton-Seed Crushing.

UNQUALIFIED SUCCESS OF

ROSE, DOWNS & THOMPSON,

HULL, ENGLAND,

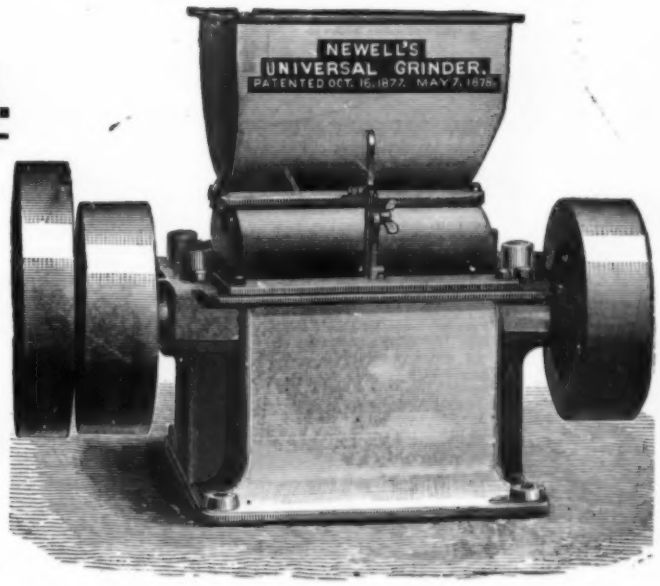
Anglo-American System of Extracting Oil from Cotton Seed,

SOLE AGENTS FOR THE UNITED STATES AND CANADA,

The Newell Universal Mill Co.

10 BARCLAY STREET, NEW YORK,

Who also manufacture the NEWELL MILL in all its forms and sizes.
☞A large stock assorted sizes of Engines and Boilers constantly on hand for immediate delivery.



NEW YORK. ✦ CINCINNATI. ✦ SAN FRANCISCO.

AULT & WIBORG,

—MANUFACTURERS OF—

BLACK ✻ AND ✻ COLORED ✻ PRINTING ✻ INKS,

Lithographic Inks and Varnishes,

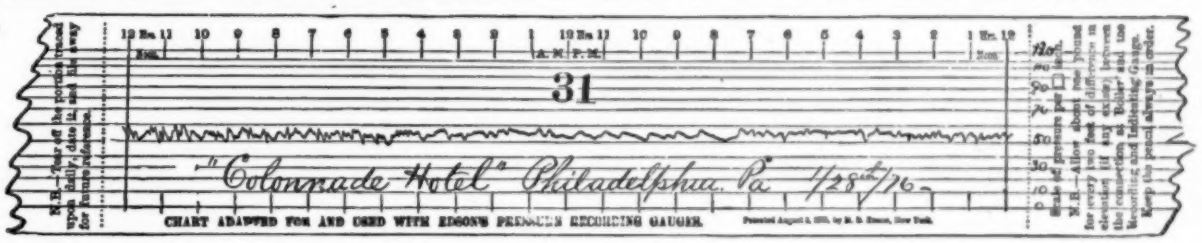
CINCINNATI, OHIO.

Eastern Branch, 21 and 23 Ann Street, - - - - NEW YORK.

—R. H. C. VALENTINE, Manager.—

EDSON'S STEAM RECORDING GAUGE AND ALARMS.

SAFETY GAUGE FOR OFFICE, with Speed Recording attachment combined.



Edson's Standard Gauges are alike adapted for STEAM, "high" and "low" pressure, WATER, OIL and GAS, in reservoirs, pipes, etc., and are indispensable to SAFETY AND ECONOMY.

The Alarm Gong, by ringing at the boiler, PREVENTS EXPLOSION, and SAVES BOTH LIFE AND PROPERTY.

The Charts are useful when inspecting Boilers for *evidence* of work done by those in charge.

The Speed of Dynamo Machines, also of Locomotives, should be recorded.

VIBRATING GONG AND BATTERY, to be placed in Engine Room.

For Descriptive pamphlet, address **THE EDSON RECORDING AND ALARM GAUGE CO.,**
91 Liberty Street, New York.

If you contemplate the erection, extension, or alteration of any Mill, Factory, or Mechanical Works of any sort, requiring *Steam, Water*, or *Gas* to be introduced, it will well repay you to send for our Catalogue and Price-List. It contains upwards of 600 Cuts, and will be found of service to **Pipe-Fitters, Engineers, Superintendents of Railroads, Mills, Factories, Water, Ice, Oil** and **Gas Companies**, and all who are interested in the use of Steam, Water, and Gas, and is an exhaustive book of reference for the selection of such goods.

PANCOAST & MAULE, 243 and 245 South Third Street, Philadelphia.

Steam

Wrought-Iron Pipes, Cast-Iron Pipes, Boiler Tubes, Spiral Riveted Wrought-Iron Pipes, Cast-Iron Fittings, Wrought-Iron Fittings, Malleable Iron Fittings, Bent Coils of Wrought Iron Pipe for Heating, Boiling, &c., Steam Radiators. Brass and Iron Cocks and Valves, Radiator Valves, Openway Valves, Boiler Trimmings, Gauge-Cocks, Steam Gauges, Water Gauges, Steam Whistles, Lubricators, Oil and Tallow Cups, Revolution Counters, Gongs, Steam Boiler Tube Cleaners, Steam Boiling Kettles, Feed-Water Heaters, Pressure Regulators, Damper Regulators, Steam Traps, Glue Heaters, Injectors, Inspirators, Steam Pumps, Syphon Pumps, Engine Governors, &c.

Contractors for Steam-Heating Apparatus of all kinds.

Water

Wrought-Iron Pipes—Plain and Galvanized, Heavy Cast-Iron Pipes, Fittings of all kinds, Cast-Iron Soil Pipe, Green-House Boilers, Pipe and Fittings, Pumps of every description—Steam- or Hand-Power, Fire Hydrants and Valves, Street Main Valves, Foot Valves, Hose Valves, Pipes, Couplings, &c. Bath Boilers, Brass Water-Cocks and Valves in Detail.

Gas

Wrought- and Cast-Iron Pipes, Cast, Wrought, and Malleable Iron Fittings, Brass Fittings, Service and Meter Cocks, Gas Burners, Solder Furnaces, Gas Valves, Street Lamp-Posts and Lanterns, Gas-Fitters' Tools and Sundries.

Tools

Hand and Power Pipe-Cutting and Threading Machines, Pipe Stocks and Dies, Pipe Taps, Drills and Reamers, Machinists' Die-Plates, Machinists' Taps, Solid Bolt Dies, Pipe-Tongs, Adjustable Tongs, Pipe-Wrenches, Monkey-Wrenches, Gas-Fitters' Plyers, Augers, Pipe-Cutters, Pipe Vises, Chisels, Ratchets, Gas-Fitters' Pumps, Boiler Tube Brushes and Cleaners, Boiler Tube Expanders, Hydraulic Punches and Jacks, Patent Hand Hoisting-Machines, Oilers, Hammers, &c.

Correspondence solicited from parties requiring any Goods in the above lines.

MENTION THIS PAPER WHEN YOU ADDRESS US.

McShane Bell Foundry

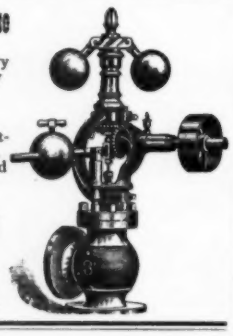
Fine Iron and Brass Castings Made to Order.

Manufacture those celebrated **Bells for Tower Clocks, Court-Houses, Cotton Mills, Factories, &c.** Prices and catalogues sent free. Address

H. McSHANE & CO.
Baltimore, Md.

The Gardner Governor.

Over 30,000 in Use



Adapted to every style of stationary and portable steam engines.

Warranted to give satisfaction, or no sale. For Circulars and Prices address

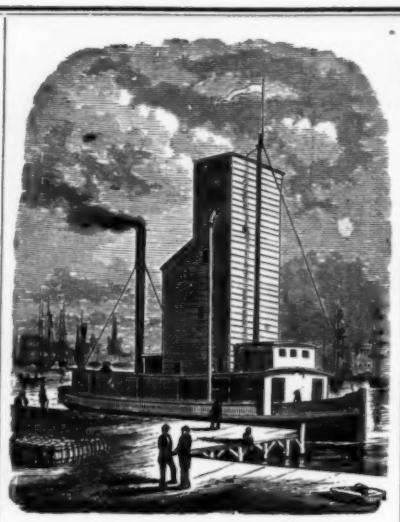
The Gardner Governor Co.
QUINCY, ILL.

Vulcan Works

BALTIMORE, MD.

All the Tools and Machinery of the above Establishment are offered at private sale. They comprise all the plant of a first-class establishment. Property for sale or lease. Send for catalogue.

H. R. HAZLEHURST.



F. H. FOLSOM,

Millwright and Mechanical Engineer,

48 S. Frederick St., BALTIMORE, MD.

All work executed and Drawings furnished at shortest notice for Floating and Stationary Elevators, Flour Mills, Malt Houses, Breweries, Saw Mills, Fertilizer Factories, Sumac Mills, Paper Mills, and all other kinds of Machinery.—*Orders by mail promptly attended to at lowest prices*

Agent for Seldner's Improved Belt Fastener.

—Send for Circular and Sample.—

Galvanized Iron

CORNICE.

Architectural Sheet Metal Work.

Galvanized Iron Gutters made in lengths of 8 feet without a joint. Corrugated Iron Sheds and Buildings.

GEDDES'S PATENT METALLIC SKYLIGHT,

OR A SYSTEM OF GLAZING WITHOUT PUTTY.

VENTILATION.—Ventilating Apparatus a Specialty. Correspondence Solicited

JAS. W. GEDDES & CO.

67 and 69 North St., Baltimore.

THE FAVORITE

Transfer Steamer "Maryland" Route.

THROUGH PULLMAN CARS FOR

BOSTON

Without Change.

LEAVE CHARLES-ST. DEPOT at 3 P. M. week days; Sundays at 5.40 P. M., arriving in Boston at 7.55 A. M. next day.

Ask for Tickets via *New York & New England Railroad* at Penna. Railroad Ticket Offices.

—ESTABLISHED 1865.—

Steam Boilers

JOHN T. COLEMAN & SONS,

Steam Boiler Works,

Cor. Holliday and Pleasant Sts., Baltimore

Manufacturers of all kinds of Steam and Bath Boilers, Smoke Stacks, Water Tanks, Lard Kettles, &c. Particular attention given to repairs.

STEPHENS' VISES.

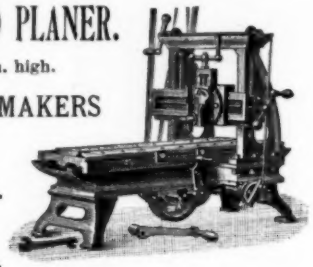
FLAT and SWIVEL BASES; SOLID JAWS STEEL FACED and SOLID STEEL BARS; ADJUSTABLE ATTACHMENTS.

For Jewelers, Machinists, Car and Locomotive Works and all other Vise Work they *maintain their superiority in strength, firmness of grip, durability and make;* while affording the *greatest economy in time and labor.* Special Vises for Amateurs and Wood-Workers. Sold by the Trade. Send for Circular.

MELVIN STEPHENS, Proprietor,
Office, **41 Dey St., NEW YORK.**

TOOLS. IMPROVED POWER OR HAND PLANER.

Planes 27 in. long, 12 in. wide, 8 in. high.



MACHINISTS, ENGINEERS, MODEL MAKERS

and all classes of Mechanics can find **TOOLS** to suit them at

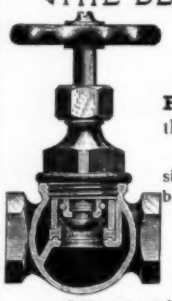
184 to 188 Washington St.

BOSTON, MASS.

A. J. WILKINSON & CO. Catalogues free.

THE BLESSING PATENT RENEWABLE SEAT.

Phosphor Bronze Stop and Check Valves.



The Renewable **SEATS** and **DISCS** are cast from the best **PHOSPHOR BRONZE METAL,** which has lasting qualities, double that of the best Steam Metal commonly used in first class valves.

The Seats do not have to be screwed in and out, but are simply dropped into their places, and are held in position by the bottom of the cage, which is cast on cap.

ALSO, RETURN STEAM TRAPS.

MANUFACTURED BY

The Albany Steam Trap Co.,

Office and Works,
78 and 80 CHURCH STREET, **ALBANY, N. Y.**

OFFICE 43 PARK PLACE WORKS 57.59 AND 61 LEWIS ST. 60.62.64&66 Cannon ST. NEW YORK

PROGRESS MACHINE WORKS A. & F. BROWN

PATENT STEEL SHAFTING

Of Superior Quality.

PULLEYS, HANGERS, COUPLINGS, &c.

PATENT SELF-OILING HANGERS.
PATENT INTERNAL CLAMP COUPLINGS.
PATENT FRICTION CLUTCHES.

A. & F. BROWN, 43 Park Place, N. Y.

STUEBNER & WOODS

168 & 170 E. Third St., Hunter's Point
LONG ISLAND CITY, N. Y.

MANUFACTURERS OF

COAL DEALERS AND STEVEDORES' SUPPLIES.

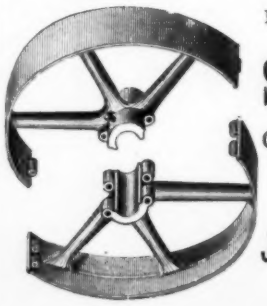
STEEL and IRON COAL TUBS,

Side and Bottom Dumping Cars, Coal and Coke Barrows,

HOISTING BLOCKS, ETC.

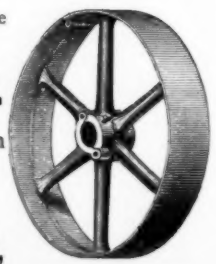
Send for Circulars, &c.

PATENT CLASP PULLEY



Made in Halves. Same Price as Whole Pulleys.

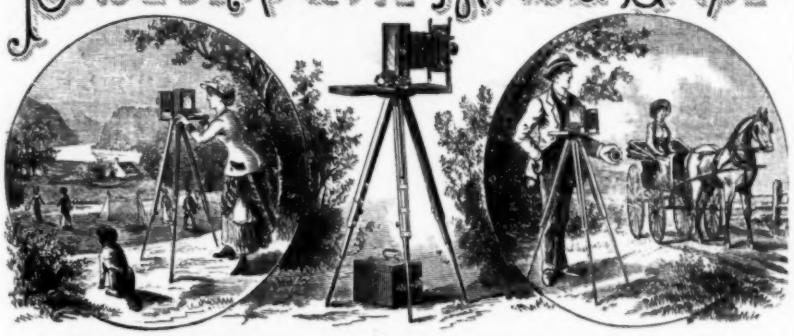
Shafting, Hangers.



Castings of Every Description Made. Stationary, Distillery, Mill and Boiler Work.

JNO. N. MARQUETTE,
No. 6 W. Falls Avenue, Baltimore, Md.

PHOTOGRAPHY MADE EASY



AMATEUR EQUIPMENTS IN GREAT VARIETY, FROM $10 UPWARD.

Sole Proprietors of the Celebrated Novel Cameras.

E. & H. T. Anthony & Co.

Send for Illustrated Catalogue.
☞ Forty years established in this line of business. 591 Broadway, New York.

JOHN R. EDWARDS,
Blank Book Manufacturer,

LITHOGRAPHER, PRINTER AND STATIONER,

167, 169 AND 171 W. LOMBARD ST. COR. SHARP ST.

BALTIMORE, MD.

Specialty: Account Books to order for Manufacturing Establishments, Banks and Insurance Companies. ☞ Estimates Furnished.

John G. Mengel & Co.

LEADING

Type-Founders and Electrotypers

Modern Book, Newspaper, and Job Type cast in a superior Copper-Mixed Metal, and on the new

JUSTIFIABLE SYSTEM OF BODIES.

LARGEST PRINTERS' SUPPLY HOUSE in the SOUTH

Dealers in and Agents for all the leading Cylinder and Job Presses, Paper-Cutters, &c., &c.

Agents for the Celebrated German Printing Inks.

SECOND-HAND MACHINERY Bought, Sold, and Exchanged.

Complete Newspaper and Job Offices Furnished at the Lowest Prices and on good terms.
Send for Specimen Sheets, Estimates, &c., to

31 German Street, Baltimore.

ALWAYS ASK FOR
ESTERBROOK'S
CELEBRATED
STEEL PENS.

PENS

LEADING NUMBERS:
048, 14, 130, 333, 135, 161
For Sale by all Stationers.
The Esterbrook Steel Pen Co.
26 John Street, New York

FOR SALE CHEAP!

Constantly on hand a line of Machinery, new and second hand, such as Engines, Boilers, &c. Manufacturer of **MATTHEWS' AUTOMATIC HIGH-SPEED ENGINE** for Electric Light purposes, requiring steady, reliable power. ☞ STEAM POWER FOR RENT.

JOSEPH B. MATTHEWS,

41 Centre Market Space, BALTIMORE, MD.

GOVERNORS { For Water Wheels } Cohoes Iron Foundry and Mch. Co.
Send for Catalogue. Cohoes, N. Y.

GRAND HOTEL

BROADWAY and 31st St., NEW YORK.

EUROPEAN PLAN. HENRY MILFORD SMITH & SON, Proprietors.

ADAMS HOUSE,

EUROPEAN PLAN.
HALL & WHIPPLE, PROPRIETORS.
WASHINGTON STREET.

BOSTON.

BAY STATE HOUSE,

WORCESTER, MASS.

W. L. SHEPARD, Proprietor.

This House has been thoroughly repaired and renovated, and will be KEPT STRICTLY FIRST CLASS IN EVERY RESPECT.

The Only First-Class Hotel in the City. **Rates, $3.00 and $3.50 per day**

The True Idea of Assurance.

Women's Mutual Insurance and ACCIDENT COMPANY.

PRESIDENT,
ELIZABETH B. PHELPS.

VICE-PRESIDENT,
MARGARET HOLCOMBE.

FANNY M. GERARD, Treas. ELIZABETH S. ROBERTS, Secy. CORNELIA KAMPING, Actuary.

MEDICAL EXAMINERS.

ALFRED K. HILLS, M. D., 465 Fifth Avenue. MARY PUTNAM JACOBI, M. D., 110 W. 34th Street.

JOHN A. KAMPING, Attorney and Counsel, 128 Broadway, New York.

The Company is incorporated under the Laws of New York, approved by the Supreme Court and Superintendent of the Insurance Department, and subject to the latter's supervision.

ITS OBJECT

is surely and cheaply to provide an indemnity for loss by death and accidental disablement.

ITS PLAN

consists in assessing the members ratably according to age in the Life Class, and according to occupation or degree of risk in the Accident Class whenever a loss in either class occurs. In other words, the actual losses only are paid by the policy holders, which thus secures insurance at cost.

ITS MEMBERSHIP

comprises persons between the ages of 16 and 67, of approved physical condition. The Life Class is separate and distinct from the Accident Class, members being liable for losses only occurring in the class to which they belong. This company, having been organized for the purpose of removing the prejudices which created discrimination in Life insurance against women, has adopted the broad principle of no discrimination in membership on account of sex.

ITS SAFETY AND SECURITY

consists in its economical system, its certainty of solvency, (for it incurs no risk but what the members may discharge by one assessment,) and its SECURITY RESERVE FUND, which in time, it is calculated, will make a member's membership self-sustaining.

ITS RATES OF ASSESSMENT

are safer than those adopted by others, and are no more expensive.

FINALLY,

This company confines itself to the legitimate business for which insurance has been accorded protective and encouraging legislation; it proposes to adhere strictly to business principles in its management, and to establish the fullest protection to its members in a manner the simplest, cheapest and most complete of any organization of equal safety. Membership may be acquired by letter. Apply to

ELIZABETH S. ROBERTS, Secretary,
283 Fourth Avenue, New York.

This Company requires Agents in every city, town and village, to whom liberal terms will be given. Address as above.

SEEDS —AND— PLANTS
For 1885.

Our Illustrated Catalogue of **"EVERYTHING FOR THE GARDEN,"** full of valuable cultural directions, containing three colored plates, and embracing everything **new** and **rare** in **Seeds** and **Plants**, will be mailed on receipt of stamps to cover postage (5 cents). To customers of last season sent FREE without application.

Peter Henderson & Co.,

35 & 37 Cortlandt St.,
New York.

WESTINGHOUSE, CHURCH, KERR & CO.

Contracting and Consulting

Mechanical Engineers.

Design and furnish Everything Pertaining to the

Generation, Transmission and Application of Power.

17 CORTLANDT ST., NEW YORK.

E.W.BLISS

PRESSES & DIES.

FINE ENGINE LATHES AND SHAPERS.

SPECIAL MACHINERY FOR TIN & SHEET METAL WORKERS

PLYMOUTH, PEARL & JOHN ST'S. } BROOKLYN, N.Y.

WORK-SHOPS

Without Steam Power

SHOULD USE

BARNES'

Patent Foot Power Machinery. COMPLETE Outfits for actual workshop business. With them Builders, Cabinet Makers, Metal and Wood Workers compete with steam power. Machines **on trial** if desired.

Proof of value, prices, full detail, illustr'd catalogue, free.

W.F. & John Barnes Co.
Rockford, Ill.

Address No. 221 Ruby St.

☞ Dealers, send for Discounts.

Barnes' Pat. Upright Drills.

29-inch Swing, with both Worm and Lever Feed.

Barnes' Patent Engine Lathe

15-inch swing, 6-foot or 8-foot Bed. These machines are made a specialty in our factory, they have advantages not found in other machines in this line. It will pay parties desiring to purchase, or know more about this class of machines, to send for full description and prices.

W. F. & JOHN BARNES,
221 Ruby St., Rockford, Ill.

STEEL CASTINGS

FROM 1-4 to 15,000 lbs. WEIGHT.

True to pattern, sound, solid, free from blow-holes, and of unequaled strength.

Stronger and more durable than iron forgings in any position or for any service whatever.

20,000 CRANK SHAFTS and 15,000 GEAR WHEELS of this steel now running prove this.

CRANK SHAFTS and GEARING specialties.

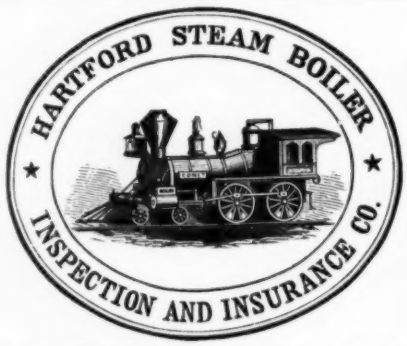
STEEL CASTINGS of every description.

☞ Send for Circulars and Prices to

CHESTER STEEL CASTINGS CO.

Office, 407 Library Street, Philadelphia. **Works, Chester, Pa.**

—ISSUES— POLICIES OF INSURANCE AFTER



A CAREFUL INSPECTION OF THE BOILERS,

Covering all Loss or Damage to

Boilers, Buildings and Machinery

ARISING FROM STEAM BOILER EXPLOSIONS.

☞ The Business of the Company Includes All Kinds of Steam Boilers.

Full information concerning the plan of the Company's operations can be obtained at the **COMPANY'S OFFICE, Hartford, Conn.**, or at any agency.

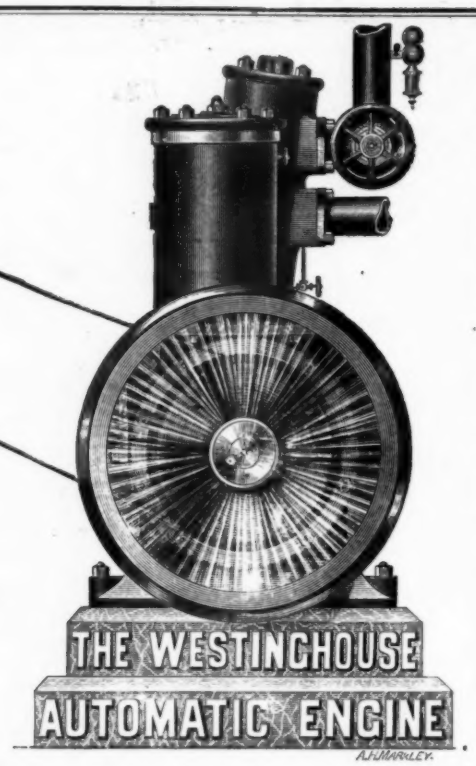
M. ALLEN, Prest. **W. B. FRANKLIN, Vice-Prest.** **J. B. PIERCE, Secty.**

—BOARD OF DIRECTORS:—

J. M. ALLEN, President.
LUCIUS J. HENDEE, President Ætna Fire Insurance Co.
F. W. CHENEY, Asst. Treas. Cheney Bros. Silk Mfg. Co.
CHARLES M. BEACH, of Beach & Co.
DANIEL PHILLIPS, of Adams Express Co.
G. M. BARTHOLOMEW, Pres't American National Bank.
R. W. H. JARVIS, Pres't Colt's Fire Arms Mfg. Co.
THOMAS O. ENDERS, Secretary Ætna Life Insurance Co.
LEVERETT BRAINARD, of Case, Lockwood & Brainard.
GEN. WM. B. FRANKLIN, Vice-President Colt's Patent Fire Arms Manufacturing Co.
GEO. CROMPTON, Crompton Loom Works, Worcester.
WILLIAM ADAMSON, of Baeder, Adamson & Co., Phila.
HON. THOMAS TALBOT, Ex-Governor of Massachusetts.
NEWTON CASE, of Case, Lockwood & Brainard, Hartford.
NELSON HOLLISTER, of State Bank, Hartford.
CHAS. T. PARRY, of Baldwin Locomotive Works, Phila.
HON. H. C. ROBINSON, Attorney-at-Law, Hartford.

LAWFORD & McKIM, Agents for Maryland, 10 S. Holliday St., Baltimore, Md.

1,300 ENGINES NOW IN USE!



40,000 Horse Power now Running!

SALES, 2,000 H. P. per Month.

SEND FOR ILLUSTRATED CIRCULAR and REFERENCE LIST.

THE

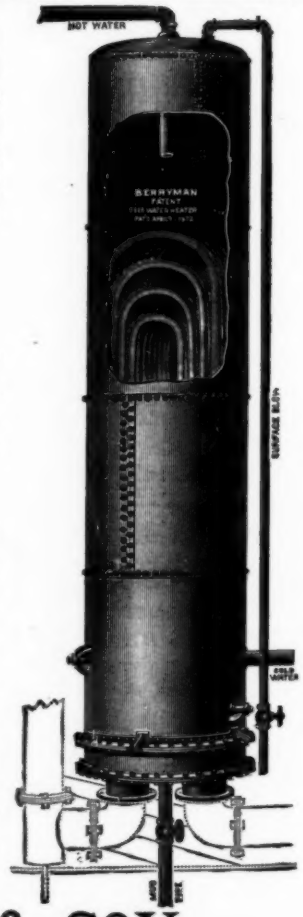
Westinghouse Machine Co., Pittsburgh, Pa.

SALES DEPARTMENT CONDUCTED BY

Westinghouse, Church, Kerr & Co., 17 Cortlandt Street, New York. Fairbanks, Morse & Co., Chicago, Cincinnati, Cleveland, Louisville and St. Paul. Fairbanks & Co., St. Louis, Indianapolis and Denver. Parke & Lacy, San Francisco and Portland, Oregon. Parke, Lacy & Co., Salt Lake City, Utah, and Butte, Montana. Keating Implement & Machine Co., Dallas, Texas. D. A. Tompkins & Co., Charlotte, N. C. Imray & Co., Sidney and Melbourne, Australia. R. Rogers, 43 Rue Lafitte, Paris. F. E. Averill, Delft, Holland.

THE BERRYMAN

Patent Feed Water Heater and Purifier



The Shells of the Berryman are of C H No. 1 iron, and tested to 175 pounds cold water. Every heater is guaranteed to be absolutely tight, making it the only Feed Water Heater applicable to a Condensing Engine, increasing the vacuum and imparting a high degree of heat in the feed water, saving eight to ten per cent.

THE BERRYMAN

has been in constant use for more than 12 years in all parts of the United States and Europe, and none have ever needed repairs. It gives the highest result attainable by the use of exhaust steam.

☞ Boiler repairs, and the vexation by shutting down when in a hurry, are saved. The trouble and expense of throwing out a poor heater and putting in a good one are saved by the use of **THE BERRYMAN FEED WATER HEATER AND PURIFIER.**

☞ All Oil or Fatty Matter is excluded from the boilers, as the feed water and exhaust steam do not come in contact by the use of **THE BERRYMAN FEED WATER HEATER AND PURIFIER.**

I. B. DAVIS & SON,

Sole Proprietors & Manufacturers in the U. S. Office & Works, HARTFORD, CONN.

PHOSPHOR-BRONZE

Trade Marks.

"Phosphor - Bronze."

The celebrated alloys in Wire, Rods, Sheets, Bolts, Wire Ropes, Wire Cloth, Castings, Ingots, etc.
Pamphlets and particulars on application to

THE PHOSPHOR-BRONZE SMELTING CO., Limited.
No. 512 ARCH STREET, PHILADELPHIA, PA.

Owners of the U. S. Phosphor-Bronze Patents.
Sole Manufacturers of Phosphor-Bronze in the United States.

COVERT'S PATENT HARNESS SNAPS, CHAIN & ROPE GOODS,

ADJUSTABLE SOLDERING IRONS, &c

These Goods are sold by all Leading Jobbers in General and Saddlery Hardware, at manufacturers' prices. Send for illustrated catalogue and price list.

COVERT MF'G CO., West Troy, N. Y.

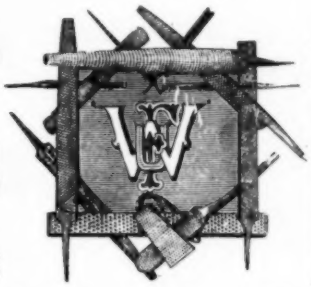
Union File Co.

311 to 315 North St., Baltimore, Md.

MANUFACTURERS OF

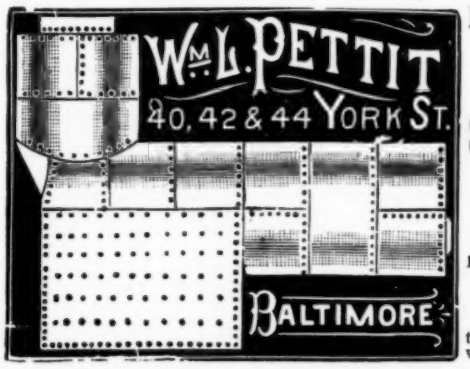
FILES & RASPS

Made from the Best Refined Cast Steel.



With the requisite facilities to produce a first-class article, we are enabled to offer Files that will give entire satisfaction.

MORITZ & KEIDEL, Agents, 48 & 50 German Street, Baltimore, Md.



NOVELTY BOILER WORKS.

MANUFACTURER OF

HIGH AND LOW PRESSURE

Steam Boilers,

Tank and Sheet Iron Work.

Estimates furnished for New Work and Repairs.

I make a specialty of SCOTCH BOILERS, the most economical in fuel, requiring very little repairs.

The Oldest Oil House in the City. Business Established 1832 (on Present Premises.)

WM. C. ROBINSON & SON,

81 SOUTH ST., BALTIMORE, MD.

Manufacturers and Wholesale Dealers in **OILS!**

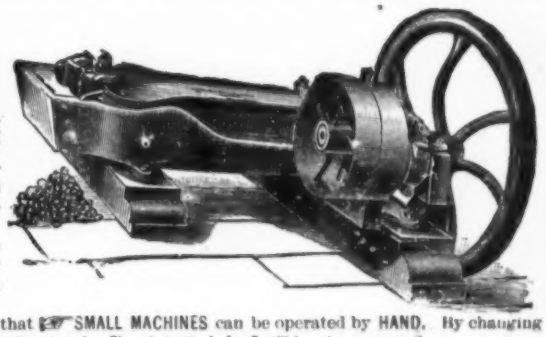
Specialties—Oils for Cotton and Woolen Mills, Railroads, Tanners' and Machinery Use.

Our Colophine Cylinder Oil is the best in use, 650° fire test, 28° gravity. Perfect Engine Oil 600° fire test, 20° gravity. Colophine Engine Oil 550° fire test, 23° gravity. Agent for Downer's Spindle, Champion and Mineral Sperm, Meriam & Morgan's Paraffine Co's Paraffine, William's Odorless Lubriphene Oils. Also Manufacturers' Agent for 25°, 28° and 30° Paraffine, and 31° Neutral Bloomless Oils. Correspondence solicited.

ROADS, MINES and FARMS.

FORSTER'S

Rock Breaker.



Owing to its peculiar SIDE MOVEMENT does not "Shatter" the stones as all other crushers do, but makes ballast and macadam equal to HAND HAMMERED.

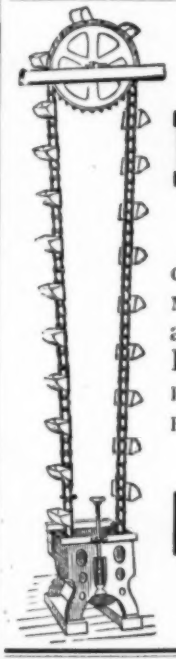
Very simple and inexpensive to operate. The only Crusher that can be operated with ordinary Horse Power.

Planters will please notice that SMALL MACHINES can be operated by HAND. By changing Dies the machine will crush and pulverize Phosphate Rock for Fertilizing, in one operation.

ADDRESS

TOFTEN & CO., Rolling Mill and Machinery Founders,

PITTSBURGH, PA.



ANTI-FRICTION

Roller Detachable Chain Belting.

Especially adapted for the rapid and economical handling of CLAY, TILE, LIME, PLASTER, CEMENTS, BROKEN STONE, COAL, ORES, SAND, DRY and WET TAN, SAW DUST, SLABS, PULP, GRAIN, FLOUR, ICE, &c., &c., &c. For ELEVATORS, CARRIERS, CONVEYERS, &c., &c. Propelling STEAMBOATS and for other DRIVING PURPOSES.

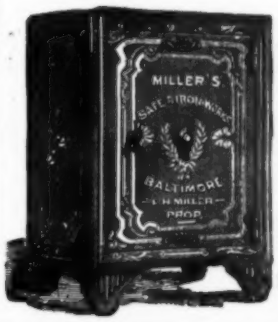
MANUFACTURED AND SOLD BY THE

Lechner Manf'g Co.

COLUMBUS, OHIO.

Send for Illustrated Catalogue.

Established a Quarter of a Century in the Manufacture of the Celebrated MILLER SAFES.



L. H. MILLER,

SAFE AND IRON WORKS,

BALTIMORE, MD

Sole Manufacturer of

Miller's Patent Fire & Burglar Proof Safes,

BANK VAULTS, DOORS AND LOCKS.

PRINCIPAL OFFICE, 252 W. BALTIMORE ST.

[NEAR HANOVER.]

Factory—Square bounded by Warner, Claret, Henrietta and Fremont Sts., South Baltimore.

CAREW'S ❋ PATENT ❋ WIRE ❋ CUTTER.

These goods have recently been greatly improved. They are now made throughout of

FORGED STEEL.

The advantage of this cutter is seen at a glance. The adjustable jaws are its main feature. These are made of the best tool steel, and are brought to a keen cutting edge before being tempered. The cutting quality is unsurpassed. Whenever they become dulled by use, they can easily be removed, by driving from the end showing price-mark, ground, and as easily replaced. This may be repeated as often as expedient; or they can be replaced by duplicate jaws, thus obviating the necessity of purchasing new cutters. **Five sizes 6, 8, 10, 12 and 14 inch.**

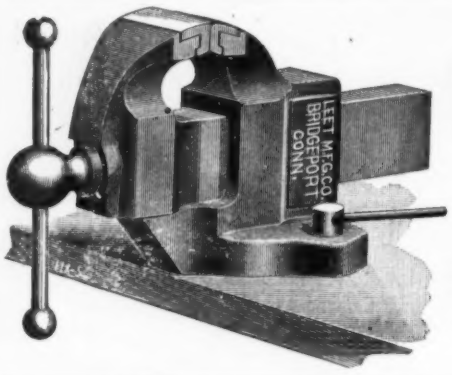
M. W. ROBINSON. Sole Agent, 79 Chambers St., N. Y.

S. W. RITTER, Millwright,

—BUILDER OF—

Flour and Saw Mills, Drug and Chemical Works, Portable Mills, Smut Machines, Mill Stones. Bolting Cloths, Brushes, Guano Fertilizer Mills, and General Mill Supplies,

261 S. Caroline Street, BALTIMORE, MD.



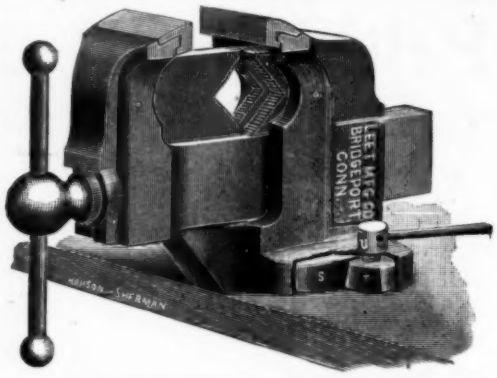
THE LEET M'F'G CO.'S

Patent Sliding Jaw Bench Vises.

WITH SWIVEL BOTTOM.

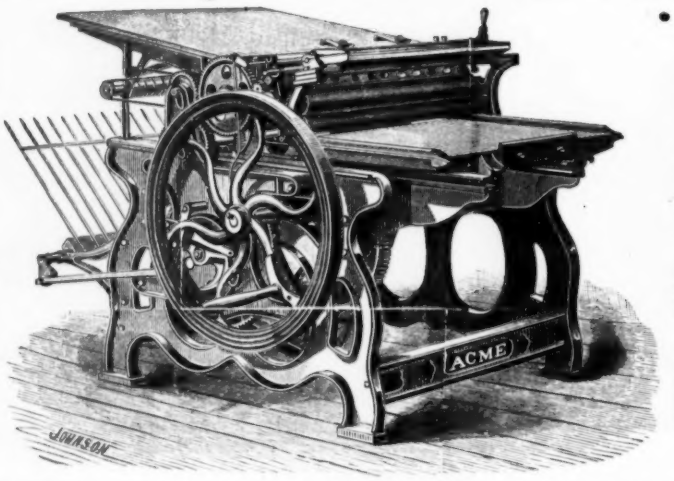
These Vises can be used either as a Sliding Jaw or a common Screw Vise by simply turning in or out the small screw in backside of the head or base. It will hold work with a more powerful grip than any other Vise. The screw will never work loose when either chipping or filing. The workmanship is perfect; all the working parts are made of steel and interchangeable. Sold by all Hardware Dealers. Send for Descriptive Circular and Price List to

C. D. LEET, Bridgeport, Conn.



The ACME Improved Two-Revolution Press.

FOR NEWSPAPER OR JOB WORK.



FOR STEAM OR HAND POWER.

These Presses combine, in a thoroughly perfected machine, many features whose value will be readily appreciated, including several which have never been practically developed by any Cylinder Press. Among these features are: Compact and firm in all its adjustments; the most perfect two roller ink distribution; speed combined with perfect registration; slow movement of the bed during the impression, and quick return; suspending the impreesion; suspends the grippers, guides and ink; ink can be distributed without inking form; unlimited rolling of the form; composition rollers interchangeable; feeder can suspend action of the ink fountain; impression adjustable while the Press is in operation; whole form accessible for correction on the Press; quiet operation without jar; great saving in wear of type; convenient height of bed.

The present hand-power Acme Presses fully equal, in capacity for fine work, the *first-class* two-roller Presses of other kinds, and they run much easier, and are also capable of higher speed by steam than any other Cylinder Press manufactured for country offices or for hand operation. The convenience of changing from newspaper to poster and job work is unequalled.

PRICES, - - $900 to $2,500.

Circulars, with sizes and prices, will be sent on application.

C. C. CHILD, MANUFACTURER,

64 Federal Street, Boston, Mass.

—ESTABLISHED 1774.—

FLOURING MILLS.

PATAPSCO 196 SUPERLATIVE PATENT C.A.GAMBRILL Mfg. Co. BALTIMORE.

BUHRS 1774. ROLLS 1882.

This Company owns and operates three Mills, as follows:

Patapsco Mill A, Ellicott City, Md. Patapsco Mill B, Baltimore, Md.
Patapsco Mill C, Orange Grove, Md.

—Having a daily capacity of **1,500** barrels.—

The value of Flour depends on the proportionate quantity of Gluten, Starch, Sugar and Phosphate of Lime Maryland and Virginia Wheat, from which our Patent Roller Flours are manufactured, is unequalled for its purity and superior quality of alible properties.

ASK YOUR GROCER FOR

Patapsco Superlative Patent. Patapsco Choice Patent. Patapsco Family. Cape Henry Family.
Patapsco Extra. North Point Family. Chesapeake Extra. Bedford Family. Orange Grove Extra

C. A. GAMBRILL MNF'G CO.

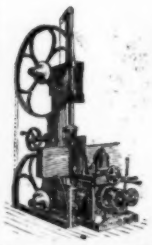
Office. 32 Commerce St., Baltimore, Md.

PORTABLE FORGES

Empire Portable Forge Co.
Cohoes, N. Y.
Send for Catalogue.

P. PRYIBIL, 461 to 467 W. 40th Street, NEW YORK.

MANUFACTURER OF SUPERIOR



WOOD-WORKING Machinery.

SHAFTING, PULLEYS, HANGERS, &c.

Send postal card for 72-page catalogue.

GUILD & GARRISON,

BROOKLYN, N. Y.

Steam Pumps,

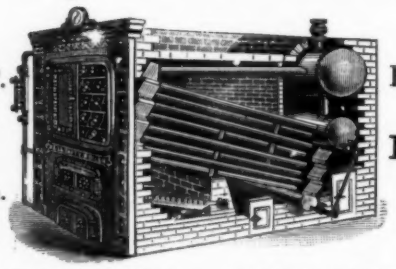
VACUUM PUMPS, AIR COMPRESSORS.

SEND FOR CATALOGUE.

Zell's Safety Water Tube Boiler.

Over 2,000 H. P. sold in the first six months.

Send for Circulars.



Economy Unexcelled, Durability Guaranteed.

POSITIVELY WILL NOT EXPLODE.

PIONEER IRON WORKS,

Manufacturers,

KING AND WILLIAM STREETS,

BROOKLYN, N. Y.

—*WM. C. CODD, BALTIMORE, Southern Agent.*—

BRASS!

Roll, Sheet and Platers' Brass,

GERMAN SILVER.

COPPER, BRASS AND GERMAN SILVER WIRE,

BRASS and COPPER TUBING,

BATTERY and PLATERS' SILVER, &c.

PHILIP R. VOGEL, Jr.

Manufacturers' Agent, No. 79 German Street, Baltimore, Md.

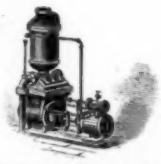
KNOWLES STEAM PUMP WORKS,

BUILDERS OF

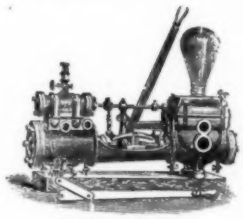
Single and Duplex Steam and Power Pumping Machinery

44 WASHINGTON ST. BOSTON.

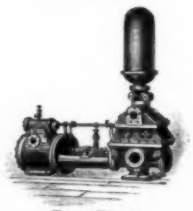
93 LIBERTY ST. NEW YORK.



PUMP AND CONDENSER.



PRESSURE PUMP.



FIRE PUMP.

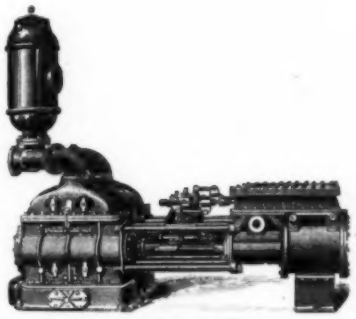
SEND FOR

ILLUSTRATED

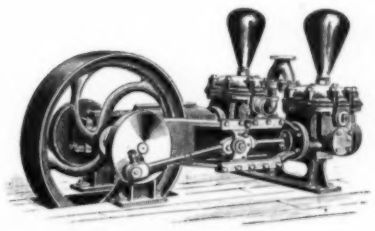
CATALOGUE,

WITH

Price-Lists.



COMPOUND PUMPING ENGINE.



DUPLEX BELT PUMP.

ESTIMATES

FURNISHED

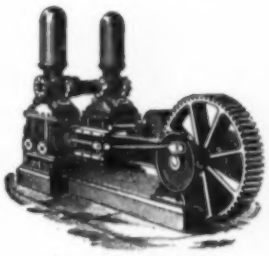
—ON—

APPLICATION.

CORRESPONDENCE

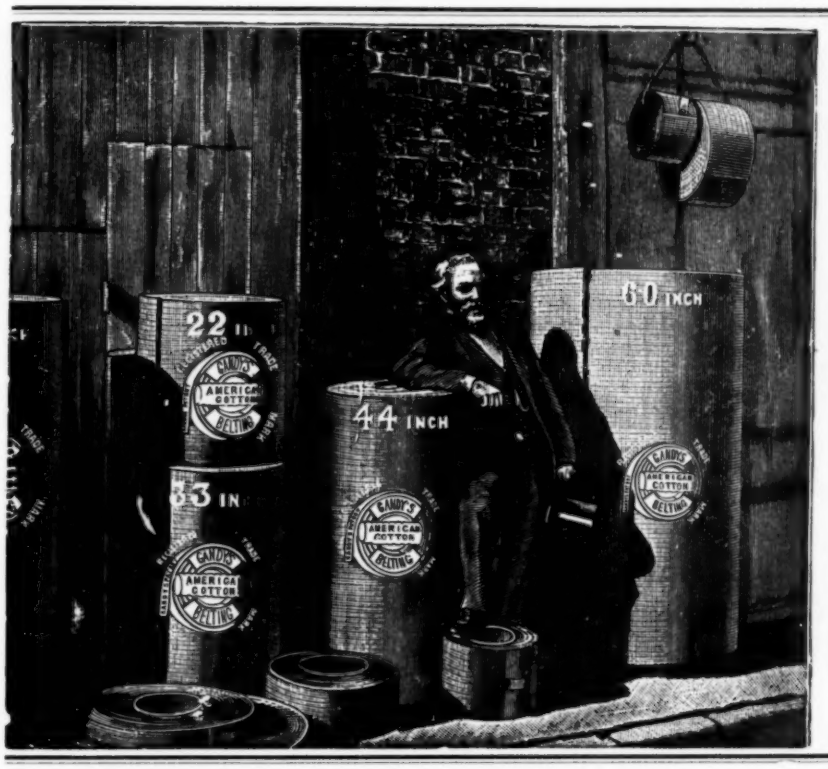
SOLICITED.

BOILER FEED PUMP.



GEARED POWER PUMP.

AIR COMPRESSOR.



SILVER MEDAL AWARDED AT THE "NATIONAL EXPOSITION OF RAILWAY APPLIANCES," CHICAGO, JUNE, 1883.

GANDY'S ✻ PATENT

AWARDED MEDALS AT

Berlin.....1879.	New Zealand.....1882.
Hamburg.....1878.	Cincinnati.....1879.
Sydney.....1879.	New York.....1880.

MACHINE ✻ BELTING

Made Perfectly Straight and any Length without Joints.

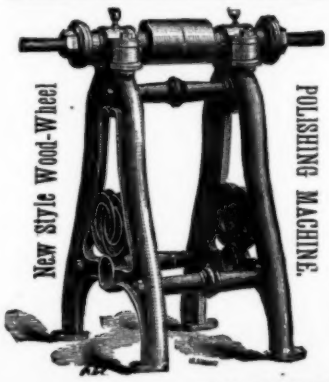
For Main Driving it is the Best.

Much Cheaper than Leather.

MANUFACTURED BY

THE GANDY BELTING CO.

BALTIMORE, MD.



UNION STONE CO.

Wood-Polishing Wheels a Specialty.

Best Material and Workmanship. Iron Bushings and Perfectly Balanced.

38 & 40 HAWLEY STREET, BOSTON.

CATALOGUE ON APPLICATION. SPECIAL CONTRACTS FOR LARGE ORDERS.

JACKSON & TYLER, Agents, 16 and 18 S. Howard Street, BALTIMORE, MD.

GEO. V. CRESSON,

PHILADELPHIA

Shafting Works,

18th and Hamilton Streets, Philadelphia, Pa.

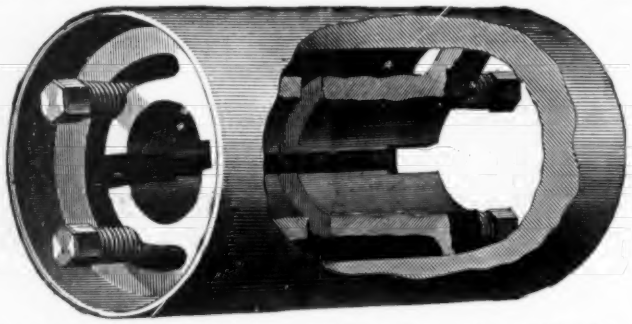
—MANUFACTURER OF—

SHAFTING,

And all the Appurtenances used in the

TRANSMISSION OF STEAM POWER.

U. S. CENTENNIAL, 1876, First Premium.



PARIS EXPOSITION, 1878.

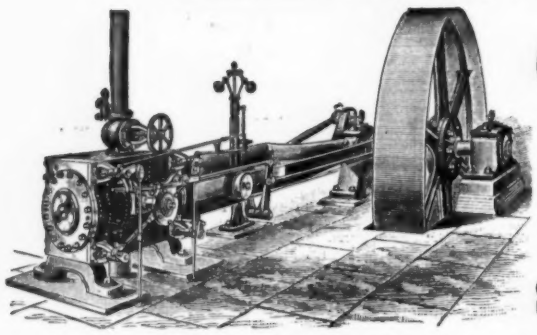
Patent Internal Clamp Coupling for Shafting.

Most easily applied and removed, and has a much stronger grip on Shaft than any other Coupling yet invented.

In use by all First-Class Machinists and Manufacturers. Many Thousands in Practical Use.

ROBT. WETHERILL & CO.

CHESTER, PA.



ESTABLISHED 1872.

Corliss Engine

BUILDERS,

Condensing, Non-Condensing, Compound. Great Economy, Durability, Close Regulation.

BOILERS,

Shafting and Gearing.

CORLISS PUMPING ENGINES,

—CITY WATER WORKS.—

Chapman Valve Mfg. Co.

MANUFACTURERS OF

STEAM, GAS AND WATER

Valves and Gates.

Fire Hydrants

With or Without INDEPENDENT VALVES.

General Office and Works,

INDIAN ORCHARD, MASS.

Treasurer's Office,

Mason Building, 72 Kilby and 112 Milk Sts., Boston.

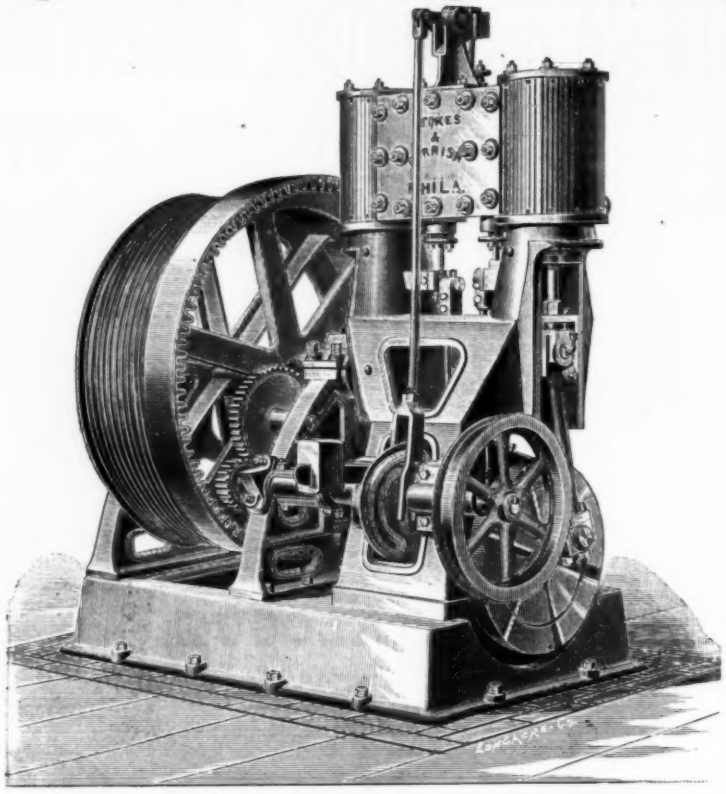
ALL WORK GUARANTEED.

Send for Descriptive Circulars and Price-List. Correspondence solicited.

STOKES & PARRISH,

PHILADELPHIA.

High-Grade Hoisting Machinery.



BLAST FURNACE HOIST,

With Vertical or Horizontal Cylinder Engines. Hoisting Machinery for Mines, Blast Furnaces, Inclined Planes, Portable Hoisting Machines. Hydraulic and Steam Power Passenger and Freight Elevators—Safety, Speed, Smooth Action.

All Kinds of Hoisting Machinery a Specialty.

Works and Office. 30th and Chestnut Sts., Philadelphia.

New York Office, 95 and 97 Liberty St., New York.

GUARANTEED

"Gilbertson's Old Method" Extra Coated Roofing Plates.

In view of the fact that we guarantee the "Gilbertson's Old Method" to be a heavier coated plate than either "M.F." or "Old Style" and if not found so, boxes to be held subject to our order, the following letter recently received by this firm (unsolicited on our part) is of value, as it comes from a roofer having many years experience.

GUARANTEED

Monroeville, O., Dec. 22, 1884.

Messrs. MERCHANT & Co.,
Philadelphia, Pa.

DEAR SIRS:—

After twenty-five years experience running a tin shop, doing roofing work, etc., I am free to say that I have never seen any plate that equals the **'Gilbertson's Old Method"** Terne lately purchased of you. It is all you claim for it, and on my own buildings I shall use no other, and shall try and have my customers let me use it for them, as I consider it economy to do so.

Yours truly,
R. G. MARTIN.

MERCHANT & CO.

525 Arch St., Philadelphia. 90 Beekman St., New York.

BUFFALO CUPOLA and FORGE BLOWERS,

PORTABLE FORGES,

Blacksmiths' Hand Blowers,

STATIONARY BLAST FORGES,

HEATING AND ANNEALING FURNACES.

Buffalo Forge Co.

490 BROADWAY, BUFFALO, N. Y.